The Dissertation Committee for Brian Kenneth Obert Certifies that this is the approved version of the following dissertation:

First-Year College Student Interest in Second-Year Retention Programs: An Examination of Applicant Profiles and Motivations

Committee:

Richard J. Reddick, Supervisor

Juan C. Gonzalez, Co-Supervisor

Edwin R. Sharpe

Martha N. Ovando

Michael P. Young

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Brian Kenneth Obert, B.A.; M.S.

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Dedication

I dedicate this dissertation and milestone to my family.

Mom

You have inspired me with your strength, resilience, sacrifice, and unwavering love. Thank you for your consistent faith in my ability to find my path in life and achieve my goals. This work would not have been possible without you.

Brother

You walked with me through the most difficult chapters of my life. Your support, laughter, work ethic, and companionship have allowed me to find the fortitude to complete this work. Thank you.

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First-Year College Student Interest in Second-Year Retention Programs: An Examination of Applicant Profiles and Motivations

Brian Kenneth Obert, Ph.D.

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Committee Supervisors: Richard Reddick and Juan Gonzalez

Many higher education institutions offer first-year college students the opportunity to participate in second-year retention programs in order to support the persistence of college students who seek assistance in navigating the college experience. Research regarding the traits that characterize second-year students and what the second-year experience entails is still in progress. (Braxton, 2000; Hunter et al. 2009; Schaller, 2000, 2005, 2010; Schreiner & Pattengale, 2000). While the existing research has built the foundation for research around the second-year experience, additional research is required to compose a truly holistic picture of the second-year experience.

The purpose of this study is to identify *the characteristics* of first-year students who choose to apply to second-year retention programs and *why* they choose to apply to such programs. The study will address three research questions.

1. What are the characteristics of students who apply to participate in a second-year retention program?

2. What student noncognitive variables reflect which students apply to participate in a second-year retention program?

3. What factors do first-year students consider when determining whether or not they will participate in a second-year retention program?

A mixed methods explanatory design (Cresswell & Plano-Clark, 2007) was implemented to investigate the research questions. The research population was composed of 337 first-year college students, primarily first generation students and students of color, eligible for participation in a second-year retention program at a large research institution in the western United States.

This study hopes to contribute to a greater understanding of *the characteristics* of first-year students who choose to apply to participate in second-year retention programs and *why* they choose to apply. The findings can inform universities as to how they can offer more effective support of second-year students in a manner relevant to their needs.
Keywords: first-year, second-year, noncognitive variables, college student, college student retention, college student persistence

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Chapter I – Introduction to the Study

In Chapter I, I outline the research problem, identify the specific purpose of this study and review the existing literature. I introduce the research questions and define the key terms central to this study. I present the methodology including the study's delimitations, limitations, and assumptions. Finally I explain the significance of the study.

Statement of the Problem

Research indicates that first-year retention programs, or university programs dedicated to the support and retention of first-year students requiring residential, mentorship, and academic components for all retention program participants, improve student retention/persistence (Barefoot, 2005; Siegel, 2005). Similarly, early research indicates that there are predictive variables for second-year persistence (Gohn, Swartz, & Donnelly, 2001; Graunke & Woosley, 2005; Richmond & Lemons, 1987; Wilder, 1993). However, the available research primarily focuses on second-year student retention and noncognitive variables rather than the process by which first-year students arrive to their second year. In this study, I aim to identify *the characteristics* of first-year students who choose to apply to participate in second-year retention programs and *why* they choose to apply.

In *Helping Sophomores Succeed: Understanding and improving the Second-year Experience* (2010), Kennedy and Upcraft explain keys and challenges to student success. Student characteristics (e.g., ethnicity, financial need, and parental support) and inputs (e.g., academic and engagement in the campus community) impact student retention.

Student indecision in the selection of an academic major and career path may also contribute to spending more time in college due to changes in their program of study. Student development issues regarding their identity, values, and life purpose may create dissonance that inhibits their ability to succeed in college (Kennedy & Upcraft, 2010). Many of these issues mirror the issues that many first-year students face. Scobie (2010) suggests that first-year support prevalent at colleges today allow students to defer addressing some of these issues until the second-year, when they find significantly less support. Schaller (2000) found that that the dissonance is common to second-year student experience and that some students handle it more skillfully than others.

While research clearly supports that a student's transition to the second year of college is full of potential obstacles, what remains unclear is which students would seek participation in a second-year retention program, if available to them. In other words, are there common characteristics among students who seek more structured self-help opportunities and those who avoid them? Are there noncognitive variables present in students who seek the support of a second-year student retention program and those who prefer to have a more independent second-year experience? Further, what types of support do these students seek in a second-year experience? These questions aim to address an aspect of the research gap regarding first-year college students' interest in a second-year retention program. This study's findings can lend institutions insight into the focus and structure of second-year programs so that they meet student needs.

Purpose of the Study

Previous research has expanded researcher and practitioner knowledge of first-year retention (Astin, 1993; Bean & Eaton, 2000; Sedlacek, 2004; Seidman, 2005; Tinto, 1993; Upcraft, Gardner, Barefoot & Associates, 2005). First-year noncognitive student retention variables, first-year student development, first-year Students of Color (SOC) and First Generation student (First Gen) retention have all been studied. Existing second-year retention literature clearly indicates that there is some overlap in the factors that are important to the retention of first-year students and those important to the retention of second-year students, but there are gaps in existing knowledge, one of which is the understanding of the characteristics of successful second-year students (Schaller, 2000; Scobie, 2010).

This study examines student biographical data, academic performance, and noncognitive factors to gain a fuller understanding of which students apply to second-year retention programs at a major four-year research university and why they do so.

Literature Review

Colleges and universities have implemented student retention programs based upon college student retention research findings generated over the last 40 years. The majority of the research and programmatic endeavors targets the college student population most at risk of departing before graduation-the first-year student. Barefoot (2005) found that at least 96% of more than 1,600 colleges and universities in the United States have some form of programming designed specifically for first-year students in the form of seminars, learning communities, service learning programs, first-year student orientation, etc. First-year experience programs have become the standard for colleges

and universities. However, until the 2000's, little research or programming was directed toward students beyond their first year of college.

An investigation into second-year student persistence indicates that there are many variables that impact second-year student persistence, including: uncertainty in major selection (Graunke & Woosley, 2005), uncertainty regarding career choices (Richmond & Lemmons, 1985), dissatisfaction with faculty and staff interactions (Graunke & Woosley, 2005; Wilder, 1993), negative self-concept (Lemons & Richmond, 1987), concern over finances (Gohn et al., 2001), lack of academic direction (Kennedy & Upcraft, 2010), and educational commitment (Wilder, 1993). Further, the second-year may leave some students feeling deprived, knowing that they cannot get the institutional attention and support they had as a first-year student. For second-year students, college is no longer a new experience. The excitement of the new environment and the freedom related to moving away from home has given way to the realization that they have at least three more years before their college career will be completed, requiring hours each week sitting in classrooms, studying for tests, and writing papers. These realities may be present while still dealing with unresolved issues from their first-year of college, determining career goals, dealing with personal development issues, and experiencing other diversions that may inhibit their ability to feel a sense of belonging in their community and in the classroom (Pattengale & Schreiner, 2000; Schaller 2000, 2010).

As colleges and universities sought to increase the rate of student retention to graduation, some researchers began to study the retention needs of second-year college students. In 2000, Braxton published *Reworking the Student Departure Puzzle* and

suggested that there were issues beyond the first-year experience worthy of investigation. That same year Schreiner and Pattengale published *Visible Solutions for Invisible Students: Helping Sophomores Succeed,* one of the first books to consider the various challenges specific to the second-year experience and how institutions could address these challenges. More recently, Hunter et al. authored *Helping Sophomores Succeed* (2009), perhaps the most comprehensive text to date regarding the second-year experience. These books compile observations and best practices for the successful retention of second-year students and offer direction for higher education administrators in programming for increased second-year retention. Yet, despite the increase in second-year college student retention research, gaps remain in understanding second-year college student needs.

This study seeks to address the gap in understanding the *characteristics* of first-year students who choose to apply to participate in second-year retention programs and *why* they choose to apply. This objective will be facilitated through the application of foundational retention research paradigms, second-year student retention research, noncognitive student variable research, college student development theory, and student retention research, including literature regarding First Generation (First Gen) student and Student of Color (SOC) retention.

Foundational Retention Research Paradigms

To understand the complexity behind college student retention and attrition requires an understanding of foundational student development theory. Student development has been well-studied over the last 80 years (Braxton, 2002). The shifting

demographics, needs, and development of college student populations (Astin, 1984, 1993; Chickering & Reisser, 1993; Pascarella & Terenzini, 1991; Tinto, 1993) coupled with gradually shifting institutional attitudes and responses to the operational realities of modern colleges and universities (Bean & Metzner, 1985; Gardner, Pattengale, Tobolowsky, & Hunter, 2010; Ishler & Upcraft, 2005; Pattengale, 2000) created fertile fields of study with implications for both students and institutions of higher education. The study of student development is an important aspect in understanding student needs for successful persistence to graduation.

Second-year Student Retention Research Themes

The following themes were gleaned from existing literature in foundational retention research paradigms, second-year student retention research, noncognitive student variable research, college student development theory, and student retention research, including literature regarding First Gen student and SOC retention and are germane to the retention of the students in the research population of this study: Positive Self-concept or Confidence, Realistic Self-appraisal, Understands and Deals with Racism, Prefers Long-range Goals to Short-term or Immediate Needs, Availability of Strong Support Person, Developing Student-Faculty Relationships, Personal and Emotional Support, Successful Leadership Experience, Knowledge Acquired in a Field of Study, Career Direction, Major Selection, Sense of Belonging, Campus Involvement, Coping with Stress and Change, and Financial Issues.

Through research in foundational retention research paradigms, second-year student retention research, noncognitive variables research, and nontraditional student

retention research, factors that may be relevant to determining *which* students seek participation in second-year retention programs and *why* they seek such programs emerged. This research will serve to guide the methodology and inform the conclusions of this research project.

Research Questions

This study addresses the following research questions:

1. What are the characteristics of students who apply to participate in a second-year retention program?

2. What student noncognitive variables reflect which students apply to participate in a second-year retention program?

3. What factors do first-year students consider when determining whether or not they will participate in a second-year retention program?

Overview of Methodology

This study utilized a mixed methods explanatory research design, requiring the collection of qualitative data after a quantitative phase to explain or follow up on the quantitative data in greater depth (Cresswell & Plano-Clark, 2007). The research population was comprised of 337 first-time first-year students who participated in the Key Communities at Colorado State University (CSU), a large, primarily residential, four year, selective, public institution in the Western United States. The 2012-13 Key Communities were comprised of participants in one of four, distinctively themed, first-year retention programs during the 2012-13 academic year. The Key Community first-year themes were: Key Academic, Key Service, Key Explore, and Key Health

Professions. In February 2013, CSU marketed the opportunity for these, and only these, students to apply for participation in the second-year retention program, Key Plus, for the 2013-14 academic year.

Colorado State University agreed to share available demographic, precollegiate academic, and collegiate academic data of all students in the research population. Following IRB approval, a systematic random sample of the population was contacted to participate in the Noncognitive Questionnaire (NCQ), a qualitative instrument which measures student noncognitive variable responses electronically. relating to adjustment, motivation, and student perceptions outside of traditional cognitive variables electronically. This survey was sent to the sample population in order to determine the relevance of various noncognitive factors in their lives as the second-year retention program application period opened. The NCQ has been used extensively in retention and admissions research and has been determined to be a reliable and valid instrument (Sedlacek, 2004; Ting, 1998; Tracey & Sedlacek, 2000) and permission from NCQ creator, Dr. William Sedlacek, was obtained (personal communication, September 24, 2012).

Once CSU collected applications and the application period closed, the research population was grouped and categorized as either “Applicant” or “Nonapplicant”. The Applicant group was comprised of only students who participated in one of the four first-year retention programs during the 2012-13 academic year and who submitted an application for participation in the 2013-14 second-year retention program. The Nonapplicant group was composed of only students who participated in one of the four

first-year retention programs during the 2012-13 academic year and who did not submit an application for participation in the 2013-14 second-year retention program.

Using disproportionate stratified random sampling to reflect the demographics of the research population as best as possible, specific members of the research population, who did not respond to the NCQ survey instrument, were contacted by e-mail to participate in focus group interviews on April 8, 2013. Focus group interviews were conducted to gain a deeper understanding of the motives of the research participant's decisions to apply or not to apply to participate in the second-year retention program available to them. Two focus group interviews were scheduled with five and eight subjects per 90-120 minute recorded focus group session. The focus groups were comprised of either Applicants or Nonapplicants. No mixed population focus groups were conducted in order to gain clear insight between Applicants and Nonapplicants. The focus group questions were generated based upon survey findings and second-year student retention issues established in existing research.

Quantitative data analysis required a statistical analysis using Fisher's exact test as calculated by STATA statistical analysis software. Qualitative data was transcribed using a transcriptionist, then coded by hand using an open, axial, and selective coding procedure.

Definition of terms.

Cognitive Variables (CV's) – The intelligence, knowledge, and academic ability a student brings to the academic environment. These factors may be measured by such

variables as course selection and completion in high school, aptitude test scores, or extracurricular involvement in academic related areas (Swail, Redd, & Perna, 2005).

First Generation Student (First Gen Student) - A student where neither parent has more than a high school education (Pascarella, Pierson, Wolniak, & Terenzini, 2004).

First-year Student - A student who enters a college or university as a first-time, full-time student, regardless of the number of credits earned.

First-Year Student Retention Program – A specific university program dedicated to the support and retention of participating first-year students. The program is composed of required residential, mentorship, and academic components for all first-year retention program participants.

Noncognitive Variables – The variables relating to adjustment, motivation, and student perceptions. Encompasses categories outside of traditional cognitive variables (Sedlacek, 2004).

Nontraditional Students – This category applies to college students who can be identified as first-generation students, Students of Color, or both.

Persistence - refers to students who continuously enroll, at a minimum, each fall and spring until either the completion of degree or certificate or the date of research (generally used in the context of a student's ability to maintain continuous enrollment).

Retention - refers to an institution's success in supporting student efforts to maintain continuous enrollment, at a minimum, each fall and spring until either the completion of degree or certificate or the date of research (generally used in the context of an institution's rate of student retention).

Second-year Student - Students that began as first-time, full-time freshmen that persist to their second year of continuous enrollment, regardless of the number of credits earned.

Second–Year Student Retention Program - A specific University program dedicated to the support and retention of participating second-year students. The program is composed of a required mentorship and academic component required for all second-year retention program participants.

Student of Color – refers to college students with at least one parent who is of Noncaucasian heritage. Members of this population are often referenced as minority students and include: African-American, Asian-American, Hispanic, Native-American, Caucasian, or Multiple Ethnicities.

Delimitations.

This study only focused on the 2012-13 first-year students at the Colorado State University participating in one of four first-year Key Academic Communities. In previous years, the research population has been composed of more than 50% First Gen students and more than 50% SOC's. While the research could focus on SOC and First Gen student issues, the focus remained on second-year retention issues for the specified research population.

Limitations.

Mixed methods explanatory research design offered the benefits of using quantitative data findings to develop qualitative questions that allowed for fuller understanding of the research problem. However, mixed methods research also exposed the research to the limitations of both quantitative and qualitative research. In this study,

the quantitative research offered insight into the lives of a small number of students resulting in findings that may, but are not likely to, differ significantly from the general population. Purposeful sampling was implemented to mitigate the chances of irrelevant data.

Qualitative research is subject to researcher bias in the structure of the research, the implementation of the methodology and in the interpretation of the results. The researcher was aware of this concern and sought to minimize this risk. The small sample size in the qualitative phase of the research limited the generalizability of the results. Proportional sampling was implemented to minimize the potential that the focus group participants were significantly different than the research population.

Assumptions.

I made the following assumptions in framing the research study: the research participants were willing and honest in their responses to the research instruments. Colleges and universities will continue to offer student retention programs. Some students will continue to require retention program support to graduate. The Noncognitive Questionnaire (NCQ) is a reliable and a valid research instrument (Sedlacek, 2004; Ting, 1998; Tracey & Sedlacek, 2000).

Significance of the Study

This study is significant because the findings may result in a stronger understanding of *the characteristics* of first-year students who chose to apply to participate in second-year retention programs and *why* they chose to apply. This understanding is important because it would allow for institutions to shape second-year

retention programs to the characteristics and motivations of participants. [here insert why it is important for students]. This study's findings can inform universities about how to better support second-year students based on their empirical needs. Second-year students could develop a greater understanding of key competencies and issues that are common to the success of second-year students. They could also gain a better understanding of their needs as a second-year student

Organization of the Study

This study is organized in a six chapter format including an: introduction to the study, review of literature and theoretical framework, Key and Key Plus Communities overview, methodology, findings, and conclusions and recommendations.

Chapter I Summary

In Chapter I, I outlined the organizational structure of the dissertation by relaying the research problem, the purpose of the study, the study's research questions, a brief overview of the methodology, key terms delimitations and limitations, researcher assumptions and the significance of the study. In Chapter II, I review existing literature including: foundational retention research paradigms, second-year student retention literature, noncognitive variable research, and nontraditional student retention findings. I also introduce Second-year Student Retention Themes theoretical framework, which serves as the lens through which I analyze and discuss the data.

Chapter II - Review of Literature and Theoretical Framework

Significance of First-Year Student Experiences

Colleges and universities across the United States have used existing research about college student retention and graduation to develop and implement programs to increase student persistence rates on their campuses (Schaller, 2005; Upcraft, Gardner & Barefoot, 2005). Much of the student retention and persistence research published on the subject since the early works of Astin (1964), Chickering (1967), Spady (1971), and Tinto (1975) in the late 1960's and early 1970's has been applied to first-year students. Upcraft and Gardner (1989) argue that student success in persistence to graduation is determined by first-year student experiences. They assert that it is the institution's responsibility to develop policies, implement programs, and innovate within the classroom to increase first-year student persistence.

Of the more than 1,600 colleges and universities in the United States, more than 1,500 have some form of programming designed specifically to increase first-year (first fall semester to second fall semester) student persistence (Barefoot, 2005). Efforts to increase first-year retention span the various components of institutions: innovative approaches to classroom teaching, various first-year seminars, more comprehensive developmental education programs, increased use of supplemental instruction, learning- and interest-centered residential programs, and new approaches to academic advising, and orientation (Barefoot, 2005). Such efforts have produced an 80.6% first-year student persistence rate at the 440 institutions participating in Consortium of Student Retention Data Exchange (Lipka, 2006, p.1).

However, once first-year students move into their second-year, they venture forward with significantly fewer institutional support mechanisms designed specifically for the challenges of the second-year. A 2005 National Resource Center for the First-Year Experience and Students in Transition survey identified only 128 examples of second-year persistence programs at U.S. colleges and universities (Cox & Tobolowsky, 2005). Considering that 10.1% of early student departures occur between the beginning of a student's second fall semester and the start of the third fall semester (Lipka, 2006) and that a relatively small number of institutions have implemented programs designed to increase second-year student persistence (Cox & Tobolowski, 2005), there is significant need to study second-year student persistence.

Higher education institutions must understand the specific needs of students beyond their first year in order to offer appropriate and effective support programs. The purpose of this research is to determine *the characteristics* of students (e.g., gender, race/ethnicity, parent's educational background, precollegiate academic performance, collegiate academic performance, etc.) who choose to apply to participate in second-year student retention programs and *why* they choose to apply to second-year student retention programs. The research population of this study is composed of first-year students eligible for participation in a second-year retention program. Historically, more than 50% of these students are First Generation (First Gen) students and more than 50% are Students of Color (SOCs). This trend continued in the 2012-13 academic year. Based on these parameters, I conducted a literature review to identify persistence factors that

overlap between first-year college students, second-year college students, First Generation students, and Students of Color.

First, I summarize foundational college student development and student persistence theories of Tinto (1975, 1987, 1993), Astin (1984), Bean and Eaton (2001), and Schlossberg, Waters, and Goodman (1995). This body of literature is broadly applicable to the study of student persistence of first-year students and this study in particular because the students are still in their first-year yet making decisions regarding their second-year of college. Second, I explain the notion of "Sophomore Slump" and Schaller's (2000, 2005, 2010) theory of second-year student retention. Third, I examine noncognitive variable research, conducted primarily by Sedlacek (2004). Noncognitive variable research is the basis for one of the research instruments of this study and has been demonstrated to reliably identify traits of successful college student persistence for First Gen students and SOCs. Fourth, I offer an overview of persistence research pertaining to First Gen students and SOCs. Though this study is investigating second-year student persistence, the large number of First Gen students and SOCs in the research population requires that research findings pertaining to these specific groups be shared. Finally, I synthesize and summarize themes identified within the literature review using a second-year student persistence conceptual framework.

Foundational Retention Research Theories

According to Braxton (2000), college student departure research has an 80-year history. He suggests that within the tradition of research into the college student departure puzzle, there is empirical support for four propositions regarding student persistence:

> First, students bring to college different entry characteristics which will impact their initial commitment to the institution. Second, a student's initial commitment to the institution will impact the student's future commitment to the institution. Third, student's continued commitment to the institution is enhanced by the level of social integration they realize early on. Finally, the greater the level of commitment to the institution, the higher the likelihood of the student being retained through graduation. (Braxton, 2000, p. 257)

In the following review of foundational persistence research theories, I highlight the ways in which the research findings of Astin (1993), Bean and Eaton (2001), and Schlossberg, Waters, and Goodman (1995) reflect aspects of these propositions. Braxton's propositions, however, are not entirely original - they were inspired by the work of Tinto (1993) and his interactionalist theory of student departure.

Tinto's interactionalist theory of student departure.

In 1975, Tinto authored one of the principle documents for the study of student persistence. Unique in its use of a longitudinal approach, Tinto derived his interactionalist theory of student departure from a synthesis of existing persistence literature. His synthesis was intended, "to not only fill in, with research findings, the various relational elements in the longitudinal model of the [early student departure] process but also to develop suggestions for further research on [early student departure] from higher education" (Tinto, 1975, p. 99). In this publication, Tinto proposed his theory which encapsulated the relationship between the student, the institution, and the variables that can lead to early withdrawal from college. There have been multiple updates and adjustments to Tinto's original theory (Tinto, 1987, 1993).

Tinto found three areas critical to student departure prior to graduation: (1) the student's characteristics prior to entering college, (2) the student's experiences upon arrival in the college community, and (3) the effect of external forces that interfere with the college experience (Tinto, 1987). Within each area, there are specific variables or experiences that contribute to student departure.

First, Tinto identified two student characteristics central to the issue of departure: intention and commitment (Tinto, 1987). Intention is the student's primary goal and directs all related educational activity. According to Tinto, the higher the educational goal, the more likely the student will persist. Commitment is the individual's level of motivation, which provides the drive necessary to persist (Tinto, 1987). Tinto claimed that intention and commitment not only help set the boundaries of individual educational attainment but also serve to influence individual experiences within the institution following entry (Tinto, 1975).

Second, Tinto (1993) identified three circumstances that impact the student's decision to either depart or remain at the institution. Termed as adjustment, incongruence, and isolation, they describe how the individual interacts within the institutional environment.

Adjustment describes the process of transitioning from one world to another (Tinto, 1987). Arrival on campus necessitates the student's separation from the familiar world of family and friends to an entirely new set of social and intellectual demands. The student's intentions, commitments, and resilience will affect the student's success in this adjustment. For most, the adjustment is difficult; for some, it is so difficult that it leads to

their early departure from the institution. He notes that the difficulty affects students from all backgrounds and ages and not only disadvantaged or minority students (Tinto, 1987).

Incongruence is the mismatch or lack of fit between the needs, interests, and preferences of the student and those of the institution (Tinto, 1987). In short, the student does not feel he or she belongs on campus. Academic incongruence is evidenced through the student's feeling that the coursework is either undemanding or excessively challenging. Social incongruence is observed in peer relationships where students feel that their personal values and interests do not match those of their peers.

Isolation is the student's sense that they lack the personal connections to establish themselves into a social network (Tinto, 1987). Lack of connections between the student and other members of the institutional community, including peers, faculty, and staff, contribute to this sense of isolation. For some students, their perceived isolation is so overwhelming that it results in early departure.

The third area critical to early student departure is the influence of external forces on the student's decision to persist or depart. Students arrive on campus and often struggle with adjustment as they reconcile their past associations with their new ones (Tinto, 1987). Tinto suggests that competing obligations between the student's past and current lives and multiple roles often contribute to withdrawal decisions. The weaker the student's academic and social engagement is on-campus the more susceptible they are to the pull of off-campus forces and early departure.

By using these areas critical to student departure, institutional practitioners are able to identify methods they can implement to mitigate the challenges students face as

they interact with the institution, campus social connections and external forces. However, there are reasons to be critical of Tinto's theory and to utilize his findings with caution.

Tinto's theory does not encompass all the complexities of the modern college or the influences acting upon the modern college student. First, while Tinto (1975, 1987) addresses the relationship of forces external to the campus to student persistence, he fails to address financial barriers to persistence. Recent research indicates that financial barriers are influential to student persistence (Gohn, Swartz, & Donnelly, 2001; Hu, 2011). Second, Tinto alludes to the relationship between student race/ethnicity and first-generation status (Tinto, 1987), but his theory does not offer more than cursory assessment of their role in student persistence. Other research offers greater insight to the role of race/ethnicity (Hurtado et. al., 2007; Swail, Redd, & Perna, 2003) and first-generation status (Davis, 2012; Inkelas, Daver, Vogt, & Leonard, 2007) in student persistence. Third, though Tinto's model is designed to be a longitudinal model (Tinto, 1975), it does not capture the psychological and developmental nature of student growth over time or the implications this growth has in persistence as do Bean and Eaton (2001) and Schaller (2000, 2005, 2010), respectively.

These shortcomings require that other theories and research supplement the use of Tinto's (1975, 1993) interactionalist theory of student departure. His theory continues to be one of the standards of student persistence research and still holds significant and broad applicability for higher education practitioners but other research, like that of Astin (1993), merits consideration.

Astin's model of student involvement.

Astin's model of student involvement (1984) was developed through the findings of a longitudinal study of college students that suggested student persistence was related to factors of student involvement. He postulated that student involvement was the amount of physical and mental energy a student devoted to the academic experience. He viewed student involvement as a behavioral phenomenon. "It is not so much what the individual thinks or feels, but what the individual does, how she or he behaves, that defines and identifies involvement" (Astin, 1984, p. 298).

The basis for Astin's (1984) model has four premises. First, involvement does not need to be specific for it to show positive influences. Second, involvement occurs on a continuum and at different rates. Third, involvement can be assessed using both quantitative and qualitative measures. Fourth, the amount of a student's academic and personal development with a specific program was influenced by the quality and quantity of student involvement in that program. The first and fourth statements are particularly relevant to this research.

The idea that involvement does not need to be specific to show positive influence indicates that there is value outside the programmatic efforts of colleges and universities. These informal, unstructured involvement opportunities with faculty, staff, and peers are the small connections that give students a sense of belonging on campus (Sedlacek, 2004). The quality and quantity of student engagement correlates to student's academic and personal development. In a longitudinal study of over 200 four-year colleges and universities and 25,000 freshmen to test his theory, Astin (1993) confirmed that academic

development, personal development, and satisfaction are directly related to student persistence. In short, the more involved a student is within the campus, the greater the student's satisfaction with the college experience and greater the likelihood of successful student persistence.

While Astin's theory addresses students who actively engage in the campus environment, it does not capture the benefits of involvement in activities that engage students in their personal development off-campus. Students of Color and First Gen students may devote some of their energy to off-campus experiences within their racial or ethnic community (Sedlacek, 2004). Other students may find off-campus engagement in their church or synagogue or through part-time employment. For some college students, engagement in their cultural or spiritual communities or in part-time employment offers them opportunities to apply their mental and physical energy in activities that have personal relevance. In this study, I take these off-campus activities into consideration in addition to Astin's foundational theory.

Astin investigated the nature of student involvement and identified its positive relationship to persistence. However the question arises, why would students choose to become involved? Bean and Eaton's psychological model of student attrition offers insight into the student behavior process and why a student might choose to pursue involvement and other behaviors.

Bean and Eaton's psychological model of student retention.

Bean and Eaton (2001) argue that leaving college is a behavior and that behavior is psychologically motivated. Bean and Eaton's psychological model of student

persistence was originally constructed by Bean (1980) to describe the variables associated with early departure from college and the psychological process associated with leaving. Bean and Eaton assert that the process of leaving early is found in the interplay of four student attributes: beliefs, attitudes, intentions and behaviors.

Beliefs are either behavioral or normative (Bean & Eaton, 2001). Behavioral beliefs are the outcomes associated with past behavior. Normative beliefs are how certain individuals or groups will comprehend a behavior. If a student believes that a certain action will lead to positive or desirable results, the individual develops a corresponding attitude toward the behavior, increasing or decreasing the individual's intent to engage in it (Ajzen & Fishbein, 1980).

Attitudes are favorable or unfavorable evaluations of an object or action (Fishbein & Ajzen, 1975) and are comprised of three characteristics. First, attitudes demonstrate consistency in student response. Second, attitudes must be based on observed behavior. Third, attitudes are learned. For example, if a student has a consistently favorable attitude toward earning quality grades in college, and sees students who study often earning quality grades, then the student will have a more favorable attitude toward studying often.

Intentions always precede action and are the single most significant predictor of behavior. Intention essentially represents the interaction of personal factors and social influences (Ajzen & Fishbein, 1980). More importantly, measurement of intention is vital in predicting and understanding behavior, like persistence (Bean & Eaton, 2001). For example, a student who has earned excellent college entrance exam scores and whose parents both graduated from college may be more likely to have the intention to graduate

from college than a student with average entrance exam scores and no parents who graduated from college.

Finally, behaviors are both an observable act and the conclusion of the process of behavior. This process, from beliefs through to behavior, is the basis of Bean and Eaton's psychological theory of college student retention (Bean & Eaton, 2001). By using this model as a foundation for research, Bean and Eaton compiled a list of key variables associated with student persistence.

To find the variables associated with early student departure, Bean (1980, 1982) distributed a quantitative survey to more than 4,000 first-year students at two universities. Through multiple regression analysis Bean identified institutional commitment, academic performance, campus involvement, intent to depart, opportunity to transfer, job certainty, practical value of an education, certainty of choice, family approval, student goals, and choice of major as the most predictive variables of student failure to persist. Many of these variables are noted throughout second-year student, First Gen student, and SOC persistence literature.

Bean and Eaton published a list of variables that have direct and/or indirect effects regarding student early departure (2001). As shown in Table 1, they identified six categories of variables that are relevant to the student's decision to persist or depart: background, organizational, academic, social, environmental, and noncognitive. These categories neatly organize a comprehensive list of variables that influence student departure behavior. Many of these variables are noted throughout second-year student, First Gen student, and SOC retention literature.

Table 1

Bean and Eaton's (2001) Categories of Student Attrition

Categories	Variables
Background	High school grade point average, college entrance exam scores (ACT or SAT), parental support, parents' educational attainment, college preparatory curriculum, class rank.
Organizational	Financial aid, orientation programs, rules and regulations, supportive environment, retention-specific programs (learning communities, first year experience, retention offices).
Academic	Course offerings, faculty interaction, academic advising, tutoring centers, campus resources (library, computer, athletic, campus life programs).
Social	Close friends on campus, peer culture, social involvement (e.g., service learning, clubs), informal contact with faculty, identification with a group on campus, social integration
Environmental	Continued parental support, little opportunity to transfer, financial resources, family responsibilities, employment, marriage
Noncognitive	Academic engagement, self-efficacy, educational commitment, resiliency, social comfort, campus engagement

Bean and Eaton's model (2001) was selected as a basis for study of second-year student persistence as it demonstrated the existence of a relationship between the student and the multitude of interactions they have with their world that can affect their persistence. Occasionally, these interactions are a part of a transitional experience in the student's life. Schlossberg, Waters, and Goodman's transition theory explains the mechanisms people use to cope with transitional experiences.

Schlossberg, Waters, and Goodman's transition theory.

Transition theory was developed by Schlossberg in 1981 and later revised by Schlossberg, Waters, and Goodman in 1995. Transition theory is a framework that facilitates an understanding of adults in transition as they cope with the ordinary and

extraordinary process of living (Evans et al., 2010). The premise of transition theory is that there is a process individuals experience as they cope with the events and nonevents in their lives. While their theory was not specifically tailored to college students, it can inform our understanding of students' process(es), and specifically of first-year and second year students, as they cope with the stresses generated by the transitions, changes, and decisions that college brings. The principles found in transition theory have informed colleges and universities in preparing students for anticipated college transitions (e.g., moving from the first year to the second year of college) and in offering support to help students cope with other inevitable transitions.

Schlossberg et al. (1995) defined transition as any event, or nonevent, that results in changed relationships, routines, assumptions, or roles. Transitions can be positive or negative experiences and generate positive or negative stress, emotions or reactions. Transition theory is comprised of three types of transition: anticipated (e.g., expecting to graduate from college), unanticipated (e.g., sudden death of a family member), or a nonevent (e.g., not being accepted to law school) (Goodman, Schlossberg, & Waters, 2006).

Transitions have context determined by the individual's relationship to the environmental setting in which the transition is occurring. The impact of the transition depends on the alterations it causes in an individual's daily life. Transitions usually occur as a series of phases, "moving in," "moving through," and "moving out," of the transitions over time (Goodman et al., 2006).

Schlossberg et al. (1995) identified four factors that influence an individual's ability to cope with transition: Situation, Self, Support, and Strategies. Individuals in transition inventory their perceived assets and liabilities in each of these factors as they prepare to cope with the transition.

Situation is the individual's assessment of the transition. Individuals will address questions associated with these factor variables: Trigger, Timing, Control, Role Change, Duration, Concurrent Stress, Previous Experience with a Similar Transition, and Assessment (Schlossberg et al., 1995).

Self is comprised of two components: personal and demographic characteristics and psychological resources. Personal and demographic characteristics include: gender, socioeconomic status, stage of life, state of health, ethnicity, and age. Psychological resources include tools used to cope: ego development, outlook, commitment, resilience, spirituality, self-efficacy, and values (Schlossberg et al., 1995).

Support refers to the type of social support available to an individual. Schlossberg et al. (1995) group support into three categories: intimates, family, friends, or institutions. The function of the support is related to the purpose of the support: affirmation, aid, or honest feedback. Measurement of support requires a judgment about whether the support is stable or changing. (Schlossberg et al., 1995).

Strategies allude to the response in coping with the transition: responses that change a situation, responses that control the meaning of the problem, and responses that manage stress in the aftermath.

As students move in, move through, and move out of transitions, they will do so on their own timeline. The process of evaluating Situation, Self, Support, and Strategies does not always occur in the same order for everyone. The process may be different depending upon the type of transition and a student's experience with that type of transition. Some people will progress through transitions with little formal processing; others will progress slowly and deliberately through the process (Schlossberg et al., 1995).

Within the foundational persistence research theory section, I have discussed various perspectives regarding college student success. Tinto (1975, 1993) identified three areas critical to student departure prior to graduation: precollegiate characteristics, campus experiences, and external forces that impact the college experience. Astin (1984, 1993) suggested that student involvement, or the amount of physical and mental energy a student devoted to the academic experience, is a behavioral phenomenon related to student persistence. Bean and Eaton (2001) asserted that the process of leaving early lies in the interplay of four student attributes: beliefs, attitudes, intentions, and behaviors. Schlossberg, Waters, and Goodman (1995) offered insight into the human process of coping with life events and nonevents.

Each of these perspectives is relevant to the research population of this study, first-year students making decisions regarding their second-year college experience. These theories capture some of the essential variables that serve as predictors of student persistence: precollegiate characteristics, campus involvement, external influential forces, the process of behavior and variables that impact the decision- making process, and

coping with the challenges of a stressful environment. This body of literature, while informative, can only serve as a foundation for this study. For this reason, I went beyond the foundational research and investigated persistence research on the nuances of the second-year experience, noncognitive variables, First Gen students, and Students of Color is necessary to develop a conceptual persistence framework of the research population for this study.

Second-year Student Retention Research

The fundamental student developmental and persistence research theories have applicability to nearly all students. General application of these fundamentals is likely to improve the persistence of second-year students, but research into second-year persistence has uncovered new elements of relevance for second-year students. The Sophomore Slump serves as a starting point for this line of inquiry.

Sophomore slump.

The higher education phenomenon known as the sophomore slump has been defined by its relationship to stressors experienced by students during their second-year of college (Vuong, Brown-Welty, & Tracz, 2010). The stressors, or variables associated with the sophomore slump include: uncertainty in major selection (Graunke & Woosley, 2005), uncertainty regarding career choices (Richmond & Lemmons, 1985), dissatisfaction with faculty and staff interactions (Graunke & Woosley, 2005; Wilder, 1993), negative self-concept (Lemons & Richmond, 1987), concern over finances (Gohn et al., 2001), lack of academic direction (Kennedy & Upcraft, 2010), and educational commitment (Wilder, 1993).

Although there is agreement about what comprises the sophomore slump, it is not clear why it occurs. Pattengale & Schreiner (2000) note that "with all the support and programming that institutions are investing in the first year, reality [for the student] often does not hit until the sophomore year, when the institution relaxes or even withdraws its support and attention" (p. vi). The second-year may leave some students feeling that they cannot get the institutional attention and support they had as a first-year student. For second-year students, college is no longer a new experience, the excitement of the new environment and the freedom related to moving away from home has given way to the realization that they have at least three more years before their college career will be completed, requiring hours each week sitting in classrooms, studying for tests, and writing papers. These realities may be faced while still dealing with unresolved issues from their first-year of college: determining career goals, dealing with personal development issues, and experiencing other diversions that may inhibit their ability to feel a sense of belonging in their community and in the classroom (Pattengale & Schreiner, 2000; Schaller 2000, 2010).

Schaller's theory of second-year student retention.

In her phenomenological, qualitative research study of 19 second-year students at a midsize, private Catholic university, Schaller (2000) sought to understand what makes the second-year experience unique. She found that second-year students asked certain questions of themselves. Why am I in college? What will I do after college? What will my major be? Schaller determined that these questions could only be answered after the excitement and newness of college had dissipated. The pressure students felt to

answer these and other questions led to deep reflection about past choices and how to manage the future. These mental struggles created a state of confusion and a perception that their progress toward graduation was not progressing as it had during their first year. She argued that transition through the second-year requires such struggles in order for students to persist through graduation.

Drawing upon research conducted by Magolda (2001) and Kegan (1994), Schaller (2005, 2010) identified four stages that second-year students traverse in three areas of their lives. The four stages are: random exploration, focused exploration, tentative choices, and commitment. The stages fall into three areas: how students viewed themselves, how students viewed their relationships, and how students viewed their academic experiences and decisions. Progression through the stages is accomplished at the individual's own pace and may be accomplished for one area of their life and not another.

Schaller (2010) stated that "most first-year students arrive on campus in the random exploration stage and progress to the next stage, tentative exploration, by the start of their second year. While in random exploration, students investigate their values and options prior to making decisions" (p. 68-69). They sample social, academic, and cocurricular activities with enthusiasm. These students also begin to experience dissonance. Where knowledge once seemed to be absolute, second-year students discovered that new knowledge may contradict previous knowledge (Schaller, 2005). Further, she found that the development of faculty, staff, mentor, and social relationships may create conflict with existing personal attitudes and beliefs. While struggling to

process the dissonance, students faced choices regarding their major, career direction, and day-to-day social and academic challenge of life at college.

In focused exploration, Schaller (2010) discovered that students expressed frustration with their current relationships, with themselves, and with their academic experiences. They questioned choices made during random exploration and contemplated the mistakes they made. Students in focused exploration became self-evaluative, self-critical, responsible, and differentiated. They entered a “neutral zone”, not moving forward or backward, as they evaluated gathered information about themselves and their world. Knowledge was viewed to be uncertain, yet these students believed the answers to their questions would eventually be found.

As students entered the tentative choices stage, they began to make decisions that determined their direction for the remainder of their college career (Schaller, 2005, 2010). They experienced a new level of responsibility that came with seeing their future more clearly. These students had an understanding of their values, skills, and characteristics. However, their choices were still tentative. Students tested various academic, peer relationship, and behavioral choices as they progressed through this stage, evaluating whether or not the tentative choice suited them. The decisions students made at this stage involved continued personal exploration and decision making that allowed for later change. Most students spent their second-year progressing through the first three stages of Schaller’s model.

The few second-year students who moved into the commitment stage were characterized by their ability to make confident decisions about their major, career path,

personal relationships and behaviors with a clear purpose and unwavering sense of responsibility for their future success (Schaller, 2005, p. 20). Yet, simply reaching this stage did not guarantee their satisfaction. Those students who failed to thoroughly explore themselves and their options in the focused exploration and tentative choices stages may have achieved commitment in an effort to escape dissonance and may revisit the same dissonance they escaped during their second year.

Schaller's conclusions indicate that the dissonance and the dissatisfaction expressed in existing second-year research (Gohn et al., 2001; Graunke & Woosley, 2005; Kennedy & Upcraft, 2010; Lemons & Richmond, 1987; Richmond & Lemmons, 1985; Wilder, 1993) may be a necessary aspect of the second-year student's transition process.

While Schaller's model is appropriate for this research study and is unique in its focus on second-year students, it does have shortcomings. One, the model was based upon a sample of 19 students at a private institution of higher education. The small sample size and lack of generalizability of the results limit its application to my study.

Additionally, while Schaller's theory of second-year student retention shed light on the second-year experience and what makes it unique (critical to the understanding of second-year students), specific student persistence characteristics are also important in considering the overall findings of my study. Sedlacek (2004) offers a glimpse into the persistence indicators of First Gen students and SOC's through the implementation of noncognitive variable research.

Noncognitive Variable Research

Noncognitive variable research was conceived as a solution to the limitations of cognitive-based admissions testing in predicting student persistence to graduation. These limitations include a lack of reliability in predicting college student persistence beyond the first year of college and a general lack of predictive value regarding student persistence of, for example, SOCs and women (Sedlacek, 2004, p. 61). In the following section, I provide a background on the value and application potential for noncognitive variables

Each year, millions of people seeking admission to colleges and universities participate in cognitive assessments like the SAT and ACT (American College Test). These assessments have been used since 1926 to help colleges and universities make college admissions decisions (College Board, 2012). Cognitive assessments are easy to administer, inexpensive, and allow admissions officers to easily measure and compare one Applicant's verbal and quantitative skills to other Applicants (Sedlacek, 2004). However, cognitive assessments have drawbacks. The year the SAT was unveiled, the College Board wrote that it should be considered only one measure in the effort of estimating the worth of others and to do otherwise would be dangerous (Brigham, 1926).

Since the publication of the College Board's warning, research has demonstrated that the power of cognitive assessments to predict persistence is limited and does not hold true across all populations. Sedlacek summarized the findings of 13 research reports on the validity of cognitive assessments:

> [Cognitive assessments] predict first-year grades fairly well for traditional students (i.e., White middle-class and upper-class males). They predict first-year grades less well for nontraditional students (e.g., cultural, racial,

> gender groups). They do not predict grades well beyond the first-year for any students. They do not predict retention or graduation well for any students in any year. (Sedlacek, 2004, p. 61)

At best, cognitive assessments offer varying degrees of predictive ability regarding first-year student persistence and have no value beyond the first-year. Therefore, study of student persistence beyond the first-year requires measures that are not cognitively based.

Sedlacek is an accomplished researcher specializing in the identification of noncognitive issues related to nontraditional undergraduate student persistence, which includes non-first-year college students, First Gen students and SOC persistence. Because this study is composed of more than 50% First Gen students and SOCs his work is particularly relevant. Sedlacek developed a model identifying eight key, noncognitive predictors of persistence. Student likelihood to persist increased with more positive responses to Sedlacek's Noncognitive Variables (Table 2). Existing literature regarding noncognitive student variables verifies the predictive nature of these variables in relation to student retention. Sedlacek has published over 50 articles and a book, *The Big Test . . . an alternative approach* (2004) illustrating the reliability of noncognitive variables in the prediction of student success.

Noncognitive variable retention research findings demonstrate that student persistence was positively correlated to the number of noncognitive variables students incorporated into their college experience. This held true for traditional students, First Gen students and SOCs in: undergraduate admissions by race and ethnicity (Tracey & Sedlacek, 1985, 1987, 1989), graduate and professional school admissions (Sedlacek, 2004), SOC success in medical school (Sedlacek & Prieto, 1990), international student

success (Boyer & Sedlacek, 1988); undergraduate SOC success (Sedlacek, 1994, 1996, 1999, 2004), first-year student-athlete success (James, 2010, Ting, 2009); academic advising of Black student-athletes (Roper & McKenzie, 1989), predicting success of students from First Gen and low-income families (Ting, 1998), and the understanding of retention by gender (Sedlacek, 2001).

Table 2

Sedlacek's Noncognitive Variables

Noncognitive Variable	Description
Positive self-concept	Strong self-feeling, strength of character. Determination, independence.
Realistic self-appraisal	Especially academic. Recognizes and accepts any deficiencies and works hard at self-development. Recognizes need to broaden his/her individuality.
Successfully handling the system (racism)	Realist based upon personal experience of racism. Is committed to fighting to improve existing system. Not submissive to existing wrongs, nor hostile to society, nor a "cop-out" Able to handle racist system. Asserts school or organization role to fight racism.
Preference for long-term goals	Able to respond to deferred gratification.
Availability of strong support person	To whom to turn in crises.
Leadership experience	In any area pertinent to his/her background (gang leader, church, etc.)sports, noneducational groups, cultural organizations.
Community involvement	Has involvement in his/her cultural community.
Knowledge acquired in a field	Unusual and/or culturally related ways of obtaining information and demonstrating knowledge. Field itself may be nontraditional.

Robbins, Le, and Lauver (2005) undertook a comprehensive noncognitive variable meta analysis and specifically examined the relationship between noncognitive variable skill factors across 109 studies. The study found that there are incremental predictive contributions by noncognitive risk factors above that of such cognitive predictors as high school GPA, socioeconomic status, or standardized test scores (Robbins et al., 2005). The utility of noncognitve variables in the prediction of student persistence led to the development of a survey tool to devoted to their measurement.

According to Sedlacek (2004), the Noncognitive Questionnaire (NCQ) began by combining various scores and measures that seemed to have validity for minority students. After years of testing, evaluating the results, revising and retesting, Sedlacek honed the NCQ into a reliable and valid survey instrument. This study will utilize, with Dr. Sedlacek's permission (personal communication, September 24, 2012), the Basic Noncognitive Questionnaire-2 found in his text, *Beyond the Big Test: Noncognitive Assessment in Higher Education*. This 29 question survey was designed specifically to assess the eight noncognitive variables found in Table 2. Several research studies verify the validity and reliability of the NCQ-2 (Ting & Sedlacek, 1999; Tracey & Sedlacek 1985, 1987, 1989) in predicting student success.

Ting & Sedlacek (1999) conducted a study at a southeastern public land-grand research university, with a total of 894 students participating (519 males and 363 females). To examine the construct validity, the researchers used principle component factor analysis to ascertain if the NCQ-2 (revised version) was a valid predictor of the proposed noncognitive dimensions. Using student retention as the dependent variable,

they employed step-wise multiple regression to predict student retention. The independent variables, which were used as predictors, included: living in a multicultural society, knowledge acquired in a field, leadership experiences, positive self-concept, preference for long-term goals, realistic self-appraisal, strong support person, high school coursework, and study method. The variables that added to predictive value in the analyses and the overall multiple correlation coefficients were high school coursework, positive self-concept, preference for long term goals, and study method and effectiveness. The overall variance predicted for this study was .38. In short, the NCQ-2 (revised version) and noncognitive variables demonstrated increased ability in predicting student persistence when used in conjunction with cognitive predictive factors.

The existing literature has demonstrated that the NCQ-2 is a reliable and valid instrument that has greater persistence predictive ability than cognitive variables for all students beyond the first year. Furthermore, it is clear that there is predictive validity of student persistence in noncognitive variable assessment, especially when applied to nontraditional student populations, like First Gen students and SOCs.

First Generation Student and Student of Color Persistence Research

Research in the persistence of First Gen students and SOCs indicates that these populations cope with issues similar to those of traditional students, but with different critical areas of need. For example, First Gen students, who do not have parents experienced in the college education process, have greater need of a university mentor who can help guide the student through their college experience than students whose parents have completed a college degree (Davis, 2010, p. 2). This is only one of many

differences between the needs of traditional students and those of First Gen students and SOCs.

First-generation student persistence research.

Commonly defined as individuals whose parents did not receive an undergraduate degree, First Gen students are educational pioneers within their families (Davis, 2010). Considering their parents did not earn a degree, it should not be surprising that these students often struggle to navigate the college experience or feel a sense of belonging in the college community. Davis (2010) states that "they are unfamiliar with the special language and the subtle verbal and nonverbal signals that, after one has mastered them, make one a member of any in-group, community or subculture" (p. 29). Students whose parents attended college have a trusted source of information to aid them in making college decisions such as course schedule selection, financial aid and scholarship applications, who to talk to about campus issues, and how to study. First Gen students often lack this support and, as a result, struggle with these issues on their own.

A 2005 study by the National Center for Educational Statistics estimated that 43% of all First Gen students enrolled in college leave college without a degree (NCES, 2005). This number is an estimate because First Gen students cannot be reliably identified by demographic information like race/ethnicity or income level. Self-disclosure is the simplest means of identification, but it is difficult to verify (NCES, 2005). First Gen students often look like other students on college campuses except for their lower likelihood to persist to graduation.

Research has demonstrated that First Gen students are more likely to have a lower college retention rate than their Nonfirst Gen counterparts (Inkelas, et al., 2007; Ishitani, 2003, 2006). Commonalities between First Gen students have helped explain why they are an at-risk population in higher education (Ishitani, 2006; Terenzini et al., 1996). First Gen students are more likely than their Nonfirst Gen peers to: grow up in low-income families (Ishitani, 2003, 2006; Ting, 1998); be from racial/ethnic minority backgrounds (Inkelas et al., 2007), receive less support from their family related to college enrollment (Davis, 2010); hold a full-time job during college (Davis, 2010); spend less time interacting with faculty (Inkelas et al., 2007; Terenzini et al., 1996); perceive themselves as less academically prepared (Bui, 2002; Ramos-Sanchez & Nichols, 2007); and to have lower degree aspirations when compared with their peers (Inkelas et al., 2007; Ishitani, 2006). These risks can be addressed by the students with the support of available campus resources, however, First Gen students are often hesitant to ask for assistance. This apprehension in seeking assistance is a characteristic of the imposter phenomenon (Clance & Imes, 1978).

While their first-year peers are making the typical adjustments to the campus climate, learning to socially and academically integrate to the campus culture, First Gen students are making even more adjustments: learning to navigate the institutional administrative channels and trying to overcome the “Imposter Phenomenon” (Clance & Imes, 1978; Davis, 2010). The impostor phenomenon or imposter syndrome is evidenced through feelings of intellectual phoniness experienced by an individual, despite evidence to the contrary (Clance & Imes, 1978). Denoting a lack of confidence or belief in one’s

ability or skill, this attitude is common among not only First Gen students but also by high achievers, particularly women, who worry that they will be "found out" and that others will eventually learn that they are incompetent, are receiving more credit than they have truly earned, or do not belong in their position (Gardner & Holley, 2011). A perplexing phenomenon, it allows a student to feel like an imposter no matter how they perform.

For students coping with the imposter phenomenon, successes are seen as good fortune or an unearned kind gesture. Failures are simply verification of how they view their ability. They attempt to compensate for their perceived lack of ability by either extreme overpreparation, or by initial procrastination followed by frenzied preparation (Chrisman, Pieper, Clance, Holland, & Glickauf-Hughes, 1995). If their task is successful, they feel a sense of accomplishment and relief, but do not feel competent. Further, the next endeavor will bring back the anxiety and self-doubt.

There are no easy solutions in helping students escape imposter syndrome. Institutional guidance toward interactions with faculty and staff and engaging in peer to peer interactions both socially and academically increase student sense of belonging on campus (Jehangir, 2009; Sedlacek, 2004). Through engagement in the campus community, First Gen students may begin to adjust to the college atmosphere and develop self-efficacy, both academically and in navigating the college experience (Astin, 1993; Davis, 2010; Ramos-Sanchez & Nichols, 2007; Tinto, 1993). Davis identified other possible solutions to increase the likelihood of First Gen student persistence. Participation in group study sessions allow First Gen students to observe the study habits of their peers.

Attendance at extended student orientation and structured guidance in navigating the university is also key for their persistence. Seeking major and career development counseling to help them find an academic and career path that will bring purpose to their academic endeavors. Involvement in meaningful activities builds personal relationships and minimizes the urge to return to the familiar surroundings of their family and friends at home. It is interesting to note that First Gen students are not the only student population to cope with the imposter syndrome. Many SOCs struggle with this frame of mind as well.

Student of Color persistence research.

There are similarities between First Gen students and SOCs, in part, because many students belong to both populations. Davis (2010) argues that it should not be assumed that First Gen status equates to SOC status or *vice versa,* but there is overlap between the two populations. Many SOCs struggle with the imposter syndrome as First Gen students do (Davis, 2010). SOCs often come from low-income households (Ishitani, 2003, 2006), spend less time interacting with faculty (Davis, 2010; Inkelas et al., 2007; Terenzini, 1996), have lower degree aspirations than their peers (Inkelas et al., 2007; Ishitani, 2006), and have doubts about their ability to succeed in college (Davis, 2010; Sedlacek, 2004). Significant literature has specifically examined SOC persistence.

The study of SOC retention is driven by quantitative evidence that many SOC populations graduate at noticeably lower rates than their nonSOC counterparts. Berkner, He, and Cataldi (2002) found that from 1995 to 2001, 33% of White students who enrolled at a four-year college failed to graduate within six years. During that same time

frame, more than 50% of African American and Latino/a four-year college enrollees failed to graduate. Findings of substantially lower retention rates of SOCs in comparison to non-SOCs was also found in some Asian American ethnic subpopulations (Berkner, He, & Cataldi, 2002). This retention disparity between SOCs and White students has prompted further research into the issue.

One comprehensive report identified the five factors most influential in minority student persistence as: academic preparedness, campus climate, financial aid, commitment to educational goals and the institution, and social and academic integration (Swail, et al., 2003). While there are other factors important to the persistence of SOCs, these factors are the most commonly cited.

Often defined on the basis of a student's cognitive precollegiate performance (i.e. High School GPA, High School Class Rank, etc.), academic preparedness was once thought to be a reliable SOC persistence indicator (Adelman, 1999). Recent research demonstrates that, while cognitive factors have some utility in predicting first-year persistence though the end of their first-year of college, noncognitive factors are more reliable indicators of SOC persistence to graduation (Hall, 1999; Sedlacek, 2004; Tracey & Sedlacek, 1987).

Realistic self-appraisal and knowledge acquired in a field are noncognitive variables closely associated with academic preparedness. Realistic self-appraisal is a student's ability to recognize and address any personal deficiencies, especially academic (Sedlacek, 2004). Swail et al. (2003) noted that between 30 and 40 percent of all entering freshmen are unprepared for college-level reading and writing. Students who are

proficient in appraising their own abilities are more likely to persist as they work to address their academic deficiencies.

Sedlacek (2004) also commented that SOCs may have acquired knowledge in a field that is not immediately identifiable as relevant to their academic preparedness. Many nontraditional students struggle to connect their lifetime of knowledge to the curriculum of the campus climate (Sedlacek, 2004; Tracey & Sedlacek, 1987). For many SOCs, this campus climate creates other challenges as well.

The campus climate may create a cultural dissonance that inhibits a SOC's ability to persist. For those who struggle with dissonance, being forced to acclimate to the dominant culture may generate conflict and tension (Museus & Quaye, 2009). Tracey and Sedlacek (1987) found African American students may require more time to graduate as they struggle with cultural isolation and expend energy coping with the cultural dissonance they experience. Other characteristics of cultural dissonance identified by SOC's include: not seeing enough professors or students of their race or ethnicity (Museus & Quaye, 2009; Swail et al., 2003), racist institutional policies and practices in place (Swail et al., 2003), difficulty having friendships with nonminorities (Swail et al., 2003), and having doubt about their ability to succeed in college (Hurtado et al., 2007). SOCs who have the ability and support to address the components of cultural dissonance created by an unfavorable campus climate are most likely to persist (Hurtado et al., 2007; Sedlacek, 2004; Tracey & Sedlacek, 1987).

Financial concerns are an impediment to persistence for many SOCs (Hurtado et al., 2007; Perna, 1998). There are typically two types of financial barriers for SOCs. First,

the benefits of earning a college degree must be viewed as greater than the direct, indirect, and opportunity costs required to attend an institution (Institute for Higher Education Policy, 1998). The realization that they are likely to earn more over their lifetime with a college degree is ignored in the face of the debt they are accruing each semester. Second, students may not understand the nuances of the financial aid system (e.g., the availability of scholarships or the realities of student loan repayment) and depart from college prior to graduation as the student debt notices arrive. Peers, faculty, or staff members who can assist students in understanding loan repayment and other financial aid processes may be able to quell short-term concerns about student debt through an explanation of the long-term financial benefits of earning a diploma.

For SOCs who are struggling with the increasing amount of debt they are accruing, encouraging them to accept enough financial aid so that they work less may be a challenge, but research indicates that students receiving more financial aid are less likely to work full-time and are more likely to persist to graduation (Institute for Higher Education Policy, 1998). An examination of Gates Millennium Scholarship (GMS) recipients found that GMS recipients were more likely to become academically and socially engaged in college, both positive indicators of persistence (Hu, 2011). In an analysis of undergraduate minority science students, Hurtado et al. (2007) concluded that decreased financial concern regarding paying for college indicated an increase in social and academic engagement and a corresponding rise in likelihood of student persistence. With fewer concerns regarding financial goals, students are able to focus on their education goals.

It is evident that educational goal setting and the congruence of the goals to the student's career path are vital to persistence to graduation. Tinto (1993) theorized that students who were committed to academic goals and their institution realized increased academic performance and persistence. Cabrera, Nora, and Castenada (1993) found that the stronger the student commitment to educational goals, the more likely the students will graduate. Astin (1977) surmised that students were more likely to achieve their academic goals when the student's major was closely aligned with their career aspirations than students with no identifiable career goal. These findings align with Sedlacek's finding that students are more likely to persist the greater their preference for long-term goals over short-term gratification (Sedlacek 1982, 2004). Students who choose to direct their energy into long-term goals may see the benefit in devoting some of their time into social and academic endeavors.

Persistence research has confirmed that students ability to integrate themselves into the social and academic culture of the campus is vital to their persistence (Astin, 1987; Terenzini & Pascarella, 1984; Tinto, 1977, 1993). Purposeful academic and social integration is more important for SOCs as the cultural dissonance and effects of imposter syndrome can lead to social and academic isolation. Purposeful integration involves developing peer relationships, peer mentorships with upperclassmen, and relationships with faculty and staff role models. These positive social and academic relationships help students generate a sense of belonging on campus. The relationships do not have to be formal to be effective. One study found that campuses where the majority of faculty and staff are White, even informal contact between faculty of color and SOCs can make a

difference in retention of minority students (Justiz, 1994). This informal contact offers well-informed faculty and staff opportunities to direct SOC's toward behaviors that increase likelihood of persistence.

Foundational literature in persistence theory produced by Tinto (1993), Astin (1984, 1993), Bean and Eaton (2001), and Schlossberg et al. (1995) effectively frame the themes common to student persistence. The second-year student persistence theory offered by Schaller (2005, 2010) paints a picture of the transition process students experience from their first-year through the end of their second-year. Sedlacek's noncognitive variable theory has demonstrated effectiveness in predicting student success beyond the first-year of college, particularly for First Gen students and SOCs. Available research regarding First Gen students and SOC's has been shared. In this review of literature, themes have emerged that are relevant to the research population of this study.

Second-year Student Retention Research Themes

This study's population is comprised of first-year students eligible for participation in a second-year retention program. Historically, more than 50% are First Gen students and more than 50% are SOCs. Based on these parameters, I conducted a literature review to identify persistence factors that overlap between first-year college students, second-year college students, first-generation students, and Students of Color. From this review, 16 factors relevant to the persistence of this research population were identified as a conceptual framework: positive self-concept, realistic self-appraisal, understand and deal with difference, prefers long-range goals, availability of a strong support person, developing student-faculty relationships, personal and emotional support,

successful leadership experience, demonstrated community service, knowledge acquired in a field, major selection, career direction, sense of belonging, campus involvement, coping with stress and change, and financial issues.

Positive self-concept or confidence is a positive indicator of student persistence. According to Sedlacek (2004, p. 39), students who have a strong self-feeling, strength of character, determination, and independence are more likely to persist through graduation than their peers. Bean and Eaton (2001) discuss self-efficacy, the confidence on one's ability to accomplish tasks and reach goals, as a positive persistence indicator. While having a positive self-concept is good for any student, it is especially important for First Gen students and SOCs who may feel they are navigating in an environment not designed for them.

Students who possess the ability to conduct a *realistic self-appraisal* of their strengths and weaknesses are more likely to persist than those who do not (Sedlacek, 2004; Tracey & Sedlacek, 1987). This noncognitive variable is especially true of a student's academic self-appraisal. Students with the ability to conduct realistic self-appraisals are able to recognize and accept their deficiencies and work to develop lagging skills (Sedlacek, 2004, p.41). Realistic self-appraisal is especially relevant for First Gen students and SOCs (Sedlacek, 2004).

The capacity to *understand and deal with differences* is of particular importance to the successful persistence of SOCs enrolled at primarily White institutions and First Gen students at any institution (Sedlacek, 2004, p. 43). For many students arriving at college, they have spent the majority of their lives surrounded by people who share their

background. Arrival at college forces students to social interact with people who may not share their background, experiences, values, or priorities. Students who arrive on campus possessing an understanding of differences and with experience coping with them have an increased likelihood of persistence (Sedlacek, 2004).

Sedlacek (2004, p. 44-45) identified students who *prefer long-term goals* as more likely to persist to graduation due to their willingness to defer short-term gratification in the interest of long-term success. Astin (1984, 1993), Bean and Eaton (2001), and Tinto (1993), have also positively associated student goal setting with student persistence.

The presence or *availability of a strong support* person was identified throughout the review of literature as being beneficial to the persistence of all students (Bean & Eaton, 2001; Sedlacek, 2004; Tinto, 1993), but especially for SOCs (Tracey & Sedlacek, 1987). Strong support persons may be noncampus related (i.e., family, friends, or other influential supporters) or campus related (i.e., faculty, staff or peers) (Sedlacek, 2004). A strong support person is a trusted, supportive figure who conveys advice, particularly in times of crisis (Sedlacek, 2004, p. 45).

Graunke and Woosley (2005) found that *developing student-faculty relationships* and interaction was a significant predictor of second-year student persistence. For First Gen students, faculty or staff members can serve as a guide and resource in navigating the campus environment (Davis, 2010). SOCs may view faculty or staff members who share their racial/ethnic heritage as mentors and role models (Swail et al., 2003). As noted by Astin (1993) and Tinto (1993), social and academic engagement is positive persistence activities, both required in developing student-faculty relationships.

One of the factors common to the research of Bean and Eaton (2001), Sedlacek (2004), and Tinto (1993) is the importance of *personal and emotional support.* Relationships with family and friends from home will change and become more distant than they were before college, creating a void of support in the student's life (Sedlacek, 2004; Tinto, 1993). Engagement within the campus community allows new social connections to be formed and new support systems to develop.

Many students have had *leadership experiences* prior to their arrival on campus that do not easily translate to the campus climate. Leadership roles in street gangs, church, sports, noneducational groups, etc., are indicators of an increased likelihood to persist (Sedlacek, 2004, p. 46). Student involvement in campus organizations is an opportunity for students to gain more traditional college leadership experience (Astin, 1993; Tinto, 1993).

Astin (1993) found that *Demonstrated Community Service* by students was an exertion of mental and physical energy into personally meaningful activities and was pivotal to successful student persistence. Service in the off-campus community (Tinto, 1993) and engagement within cultural communities (Sedlacek, 2004, p. 47) are also indicative of an increased likelihood of persistence.

Some students, often First Gen students or SOCs, arrive on campus with *knowledge acquired in a field of study* that was collected through unusual and/or culturally related ways of obtaining information and demonstrating knowledge (Sedlacek, 2004). Some students will experience cognitive dissonance as they learn to apply their

knowledge in a more traditional academic setting (Bean & Eaton, 2001; Sedlacek, 2004; Tinto, 1993).

After the second semester of their first year, there is pressure, both real and imagined, for students to complete academic *major selection* (Schaller, 2000, 2005, 2010). Graunke and Woosley (2005) examined the effects of sophomore student's experiences and attitudes on academic success and found that choice of major was a significant predictor of student academic success. This finding is also supported by other research connecting the importance of choosing a major in the sophomore year to persistence (Gardner, 2000; Gohn et al., 2001; Wilder, 1993).

Related to major selection, *career direction* is a student's sense of the career field they want to participate in after graduation. Faculty and staff interaction can help students ensure that their career path is built on a realistic understanding of the nature of the career and of the relationship of their skills and talents to the intended career (Gohn et al., 2001). Schaller (2000) found that the personal struggle to make major and career path decisions was one of the unavoidable, and necessary, challenges of the second-year experience.

Researchers have also identified the importance of social integration in the campus community and finding a *sense of belonging* (Astin, 1993; Sedlacek, 2004; Tinto, 1993). Astin theorized that the greater the level of academic and social integration, the greater the student's chances of persisting until graduation (Astin, 1993). A sense of belonging is especially important to the persistence of First Gen students and SOCs, who may feel isolated or alone on their campus (Davis, 2010).

Astin (1993) and Tinto (1993) espoused the concept that *campus involvement* and integration into the campus community is key to preventing early student departure. Integration and involvement opportunities include: partaking in campus organizations (Astin, 1993; Tinto, 1993), participation in living-learning communities (Sedlacek, 2004), and participation in community service projects (Sedlacek, 2004). Campus involvement also offers students opportunities to engage in leadership development and career exploration through academic organizations (Astin, 1993).

Research by Schaller (2000, 2005, 2010) and Schlossberg et al. (1995) discuss the difficulties of life transitions and *coping with stress and change*. Schlossberg et al. (1995) offer insight to the process of coping with stress whether as the result of anticipated transitions (e.g., expecting to graduate from college), unexpected transitions (e.g., sudden death of a family member), or a nonevent (e.g., not being accepted to law school). Schaller offers a snapshot of the transition from the first year of college to the end of the second year. Both state that transition is difficult and may generate enormous stress and confusion. Schaller indicated that this dissonance, when handled with thoughtfulness and purpose, is a positive indicator of second-year student persistence.

The literature suggests that *financial issues* are influential in student decisions to withdraw from institutions (Gohn et al., 2001). Students who are struggling in any other aspect of their education, especially major selection, may find that financial barriers are the final straw and decide to depart the university (Schaller, 2000).

The conceptual framework for this study was constructed to include significant, overlapping themes from persistence literature regarding first-year college students,

second-year college students, first-generation students, and Students of Color. The themes identified in the conceptual framework will serve to guide the data collection and data analysis.

Summary of Chapter II

The Review of Literature and Theoretical Framework were organized into four sections to analyze literature and research relevant to the persistence of the research population of this study. First, I outlined foundational college student development and student persistence theories. Second, I reviewed theoretical frameworks and concepts that focused specifically upon second-year student persistence. Third, I examined noncognitive variable research. Fourth, I summarized persistence literature related to First Gen student and SOC students. Finally, I identified themes within the literature review were synthesized and summarized into a second-year student persistence Conceptual Framework. The synthesized themes will serve to guide the data collection and data analysis.

Relationship to Chapter III

In Chapter II, I addressed research gaps, reviewed the literature on the subject, and narrowly focused the goals of the research study. The next chapter will offer an overview of the Key and Key Plus Communities in order to better understand the purpose and structure of the retention programs.

Chapter III – Key and Key Plus Communities Overview

This research was based upon the Key Academic Communities at Colorado State University. Chapter III establishes the setting and programmatic details of the research population. Colorado State University Key Communities are comprised of four first-year retention programs and one second-year retention program. The text from this chapter was liberally borrowed from the Colorado State University Key Communities Webpage. The verbiage was adjusted to fit this research and the structure was changed to create consistency between the programs for ease of comparison, while the programmatic framework was altered as little as possible. The information from the Colorado State University Website was supplemented with information gained from interviews with Key and Key Plus Community staff members, Tae Nosaka, Becky Villalpando, and Jessica Klingsmith.

Key Academic Community

The Key Academic Community, a first-year residential learning community, is comprised of 152 students living together in Braiden Hall and co-enrolling in cluster courses in groups of 19. “Students who participate in the Key Academic Community have the opportunity to build connections with faculty and staff, live with a close-knit group of students who share the values of the community, and develop leadership skills through campus and community programs” (Key Academic Community Webpage, 2013). The stated expectation of Key Academic Community students is to set and achieve high standards for academic excellence with the support and resources needed for success, an appreciation for diversity, and involvement in campus activities. Key

Academic students are encouraged to become involved in campus and community activities. To facilitate this, members of the Key Academic Community are required to participate in a number of programs and/or activities throughout the year. Each week, students are sent a KEYMAIL that outlines the various events and programs available to them on campus.

Key Academic support staff.

Since faculty and staff teach Key Academic seminars, Key Academic students have the opportunity to connect individually with them. Other faculty and staff, from time to time, may join Key Academic students for a meal or attend discussions in the residence hall. Faculty and staff will also connect students to other faculty members across campus, and may assist with choosing major or possible careers. Key Seminar Professors are encouraged to engage in activities with the students outside the classroom. The Key Academic Website lists a few of the more common activities, including: having lunch or dinner at Braiden Hall with Key Students, inviting Key students to their home for dinner or movies, taking students on field trips to local sites, and participating in service and volunteer projects with the students.

Key Resident Assistants (RAs) play a vital role in developing and maintaining an atmosphere of academic, personal and social growth in the living community established in Braiden Hall. RAs assist participants with the transition to college, serving as mentors and friends during the academic year. RAs organize hall meetings and activities around the values of the Key Academic Community to bring residents closer together, inform

residents of events in the halls, and create a special bond or a sense of belonging for students.

Key Mentors are student leaders on campus in their Junior or Senior year. Key Mentors work individually and collectively with new Key students throughout the year. Key Mentors serve as "guides" to students in their academic, leadership, and social transition to college. Key Mentors lead sessions at Key Orientation, host goal setting workshops, provide tips on time management, note taking, study skills in college, or referring students to various resources and opportunities on campus. Key Mentors are also pivotal in developing a community based on personal connection.

Key Academic Community Mentors are assigned to each of the Key Academic Clusters, and they assist students in evaluating their learning effectiveness, connect students to campus resources and opportunities, conduct mid-semester Academic Progress Conferences with feedback from your professors, and serve as the Teaching Assistant for the Key Seminar Class (KEY 192) component of the Clusters.

Key Academic community clusters.

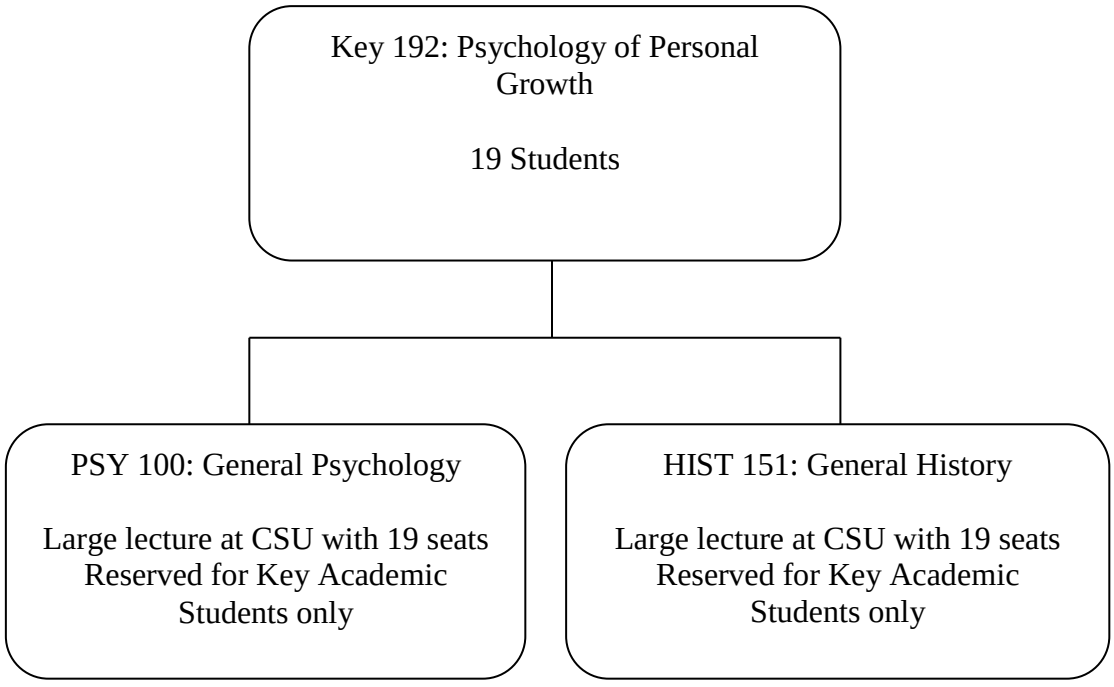
Key Academic students are required to enroll in three of their first semester classes with other students from the community in a Key Interdisciplinary Course Clusters (Cluster). A Cluster is a set of three classes linked by common themes and subject areas. Two of these classes are core classes while the Key Interdisciplinary Seminar counts as elective credits. The Key seminar is a small class of just 19 students who are in your Key cluster. The two linked core classes are general CSU courses with 19 seats reserved for Key Academic students only. This enables Key Academic

participants to know up to 18 other Key Academic peers in their classes, contributing to a more positive classroom and learning experience.

In addition, the Key Mentor serves as the Teaching Assistant (TA) for the Key Interdisciplinary Seminar Class that is the anchor course for the Key Interdisciplinary Course Clusters. There are 8 different Clusters with different themes and classes to choose from, so students from a wide variety of majors and/or interests participate in the community. An example of a Key Academic Community Cluster is pictured in Figure 1.

Figure 1

Key Academic Community Cluster Diagram



As a part of the Cluster, participants are required to attend Community Led Academic Success Strategies (C.L.A.S.S) group study sessions led by the Key Mentor. As a Cluster, students meet once a week for an hour to learn and review critical strategies

to be a successful and involved college student. Mentors lead students though learning topics including: note taking, time management, test taking skills, leadership development, and resume writing.

The Key Communities and campus partners host a variety of workshops geared toward assisting students in developing strong college level academic skills as a part of the student's participation in the program. Students are encouraged to attend Key or Key endorsed programs throughout the year. This assists students in becoming involved on campus as well as learning about involvement opportunities CSU has to offer.

Many first-time university students find it very helpful to get the most detailed feedback possible on their academics and adjustment to residence life. Key students, have the unique opportunity to meet individually with program staff to review their progress and consider strategies for achieving their best performance. Mid-semester Academic Progress Conferences are individual meetings with the Key Mentor to discuss progress on student established goals related to academics, leadership, and community. Key Mentors share grade feedback from professors during this meeting.

Key Academic program participation requirements.

Key Academic participants are required to be involved in Key sponsored or endorsed activities, to participate in at least one campus/community retreat or conference during the academic year, and ensure that they participate in a certain number of Key Community Academic Programs, Cultural Events, Leadership Events, and Service/Volunteer Work.

Key Service Community

The Key Service Community is a first-year residential learning community developed around the theme of student leadership and civic engagement. The Key Service Community is comprised of 120 students who live together in Braiden Hall and co-enroll in linked courses in groups of 19. In this community, students are encouraged to take advantage of year-long service opportunities while building connections with faculty and community organizations. Through discussion, service, and reflection, students develop a personal philosophy about their role in the world. Students also assess how they can contribute to a more civil society while becoming more active and positive role models within the university and beyond (Key Service Community Website, 2013). Key Service values include: Student leadership through civic engagement, active campus and community involvement, appreciation of diversity, and academic success.

Key students are encouraged to get involved with campus and community activities. As a member of the Key Service Community, students are required to participate in a number of programs and/or activities throughout the year. Each week, students are sent a KEYMAIL that outlines the various events and programs occurring on campus.

The goal of providing service-learning opportunities is to help students learn and develop through active participation in organized service experiences that are integrated into academic curriculum, meet the needs of a community, provide structured time for reflection, and help foster civic responsibility. According the Key Service Website there are several reasons for students to engage in Service-Learning.

- Improves academic achievement

- Positively impacts personal, social and cognitive outcomes
- Improves the interaction between faculty members and students
- Enhances students' beliefs in their ability to work for the public good
- Addresses a vast variety of social problems
- Creates and strengthens connections between people
- Serves the needs of the community as a whole
- Serves as an important part of a student's civic education, including development of political action skills, communication skills, critical thinking skills and tolerance (Key Service Website, 2013)

Key Service support staff.

Key Service Students have the opportunity to connect individually with faculty members who teach Key seminars (KEY 192). Key Seminar Professors and other faculty and staff may, from time to time, join Key Service students for a meal, attend a discussion in their residence hall, or invite Key Service participants to their home for dinner. These faculty members may be a connection to other faculty members and to assistance with choosing a major and possible career paths.

Key Resident Assistants (RAs) play a vital role in developing and maintaining an atmosphere of academic, personal and social growth in Braiden Hall. They assist students with the transition to college, serving as mentors and friends during the academic year. RAs organize hall meetings and activities around the values of the Key Service Community to bring residents closer together, inform residents of events in the halls and create a special bond and a sense of belonging for students. Their responsibilities include: actively assisting in the transition and success of new students to CSU and the residence halls, planning activities and events on their floor, and to answer questions, make friends, and develop community within their floor.

Key Service Mentors are student leaders in their Junior or Senior year, often alumni of Key Service programs, who are excelling at the university and will work individually and collectively with new Key students throughout the year. Key Service Mentors serve as guides to students in their academic, leadership, and social transition to college. Key Mentors lead sessions at Key Orientation, host goal setting workshops, provide tips on time management, note taking, study skills in college, or referring students to various resources and opportunities on campus. Key Mentors are also pivotal in developing a community based on civic engagement and personal connection.

Key Service Community Mentors are assigned to each of the Key Service Clusters, assisting students in evaluating their learning effectiveness, connecting students to campus resources and opportunities, conducting mid-semester Academic Progress Conferences with feedback from professors on Key Service student performance, and serving as the Teaching Assistant for the seminar class (KEY 192).

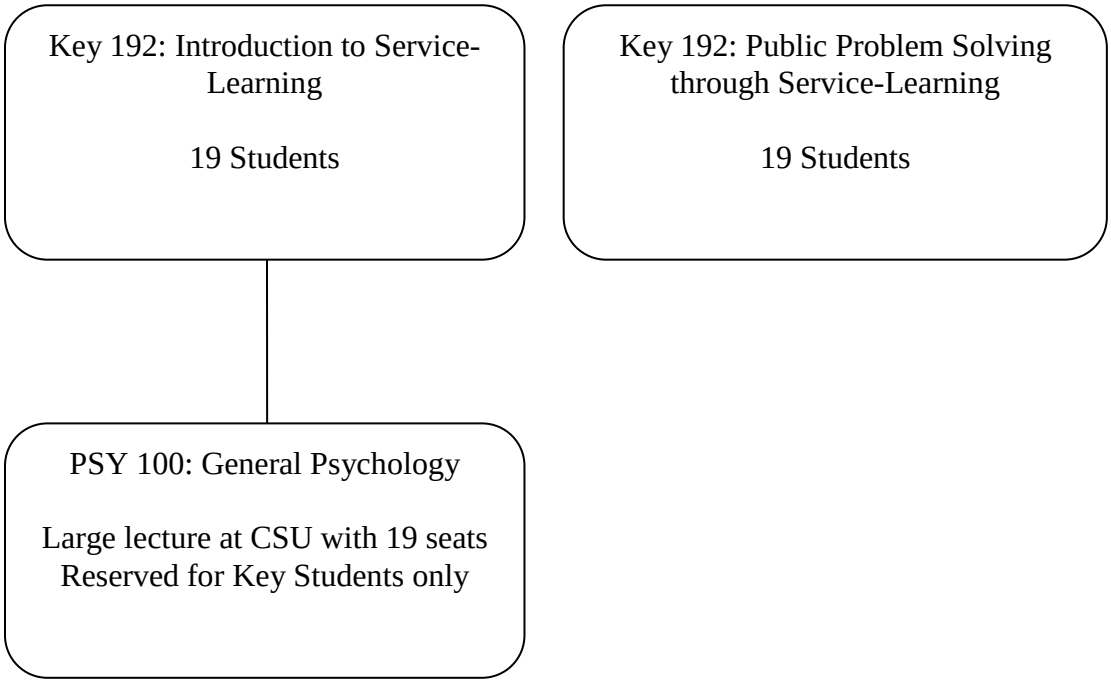
Key Service community clusters.

Key Service participants have the opportunity to enroll in two of their first semester classes with other students from the community in the Key Service Cluster. A Service Cluster consists of two classes: a 3-credit Introduction to Service-Learning class, combined with a 3-credit focused course that relates to the theme of the Service Cluster, and meets requirements for the All-University Core Curriculum. This enables each participant to know at least 18 other students in two of their classes, which will contribute to a more positive classroom experience. In addition, the Key Service Mentor serves as the Teaching Assistant (TA) for the KEY 192. There are a total of 4 Service Clusters to

choose from to accommodate a wide variety of majors and/or interests. An example of a Key Service Community Cluster is pictured in Figure 2.

Figure 2

Key Service Community Cluster Diagram



In addition, Key Service Community students will enroll in a 3-credit introduction to service-learning course: KEY 192 Public Problem Solving through Service-Learning. The course description states,

> Closely tied to the process of social problem solving, service-learning functions on the idea that students are unlikely to be effective citizens without the ability to understand complex social problems, apply what they learn, and have the critical thinking ability to make adequate judgments about the information they receive. Through their community involvement, students will gain an understanding of community issues, community assets, and community processes for making change happen. (Key Service Website, 2013)

Within this course students will engage in real-world issues and social problems, working with community organizations to become "part of the solution". In this way, students become involved not just in social issues but in relationships with others across the service-learning partnership. Ideally, a student serving in a community develops a relationship with community members and at the same time develops a deeper understanding of the root causes and broader social issues that contribute to community problems. In all of these ways, service learning is intended to help students learn and care about others and develop the skills and attitudes to become “multicultural community builders”.

Additionally, Key Service Mentors will hold study hours which allows students to spend time with their cluster of students working on and studying for classes. Service Mentors also conduct Academic Progress Conferences allowing Key Service participants to get detailed feedback on their academics and adjustment to residence life. Key Service students will have the unique opportunity to meet individually with program staff to review progress and consider strategies for achieving their best performance. Mid-semester Academic Progress Conferences are individual meetings between Key Service Mentors and Key Service participants to discuss progress on the goals set at the beginning of the year related to academics, leadership, and community. Key Mentors will share grade feedback from professors during this meeting.

Key Service program participation requirements.

Key Service participants are required to be involved in Key sponsored or endorsed activities, attend the Ram Serve day of service at the beginning of the Fall

Semester, and participate in 1-2 hours of community service/volunteer work per week. Past projects include: Poudre School District, service trip to Rocky Mountain National Park, United Nations AIDS Awareness Day, Service trip to Colorado State's Environmental Learning Center, Colorado State's Diversity Conference, United Nations World Food Day, and more.

Key Explore Community

The Key Explore Community is focused on providing first-year students who have not yet declared a major the opportunity to explore their options at Colorado State University. These 69 students live together in Braiden Hall and enroll in three classes together. This group of undeclared students will have a chance to "create their own story" in order to understand how their interests, skills, identity, and experiences have shaped who they are. Additionally, students will have social, educational and community oriented activities that help support where they are going with their major, career, and leadership paths. The Key Explore Community strives to create an environment committed to academic excellence, campus involvement, and a diverse and supportive environment.

Key Explore support staff.

Key Explore students have the opportunity to connect individually with the Academic Support Coordinator who advise them and teach the KEY 192 Seminar. Other faculty and staff occasionally join Key Explore participants for a meal or attend a discussion in the residence hall. The Academic Support Coordinators are an important

connection to other faculty members and to assistance with choosing major and possible careers.

The Key Explore Resident Assistant (RA) plays a vital role in developing and maintaining an atmosphere of academic, personal and social growth in a suite style hall. The RA assists students with the transition to college, serving as a mentor during the academic year. The RA organizes hall meetings and activities around the values of the Key Explore Community to bring residents closer together, inform residents of events in the halls and create a special bond and a sense of belonging for students.

Key Explore Mentors are student leaders on campus in their Junior or Senior year, often Alumni of Key programs themselves, who are excelling at the university. Key Explore Mentors will work individually and collectively with new Key Explore students throughout the year. Key Mentors serve as guides to students in their academic, leadership, and social transition to college. Whether leading sessions at Key Orientation, hosting goal setting workshops, providing tips on time management, note taking, or study skills in college, or referring students to various resources and opportunities on campus, Key Mentors are instrumental in developing a community based on personal connection.

Key Mentors are assigned to each of the Key Explore Seminar classes (KEY 192), serving as Teaching Assistants, assisting students in evaluating their learning effectiveness, connecting students to campus resources and opportunities, and conducting mid-semester Academic Progress Conferences with feedback from their professors. Key Explore Mentors also help students set goals and monitor their academic progress.

Key Explore community clusters.

The Key Explore Cluster is a set of three classes that Key students enroll with 18 other students in the program. Key Explore students are required to select one of the two courses offered for the Key 192: Create Your Story Seminar. Each seminar section will have 19 students enrolled and is a small academically focused class designed specifically for first year students taught by Academic Advisors. The course description is as follows:

> This course will use your personal narratives as a tool to reflect on your values, interests, goals, and identities and their impact on your academic decisions at CSU as you experience your first year of college. This class will investigate a variety of personal narratives from various cultures, creative nonfiction and memoirs, as well as visual and oral narratives. You will also explore how your story fits within potential programs of study at Colorado State University, as well as review in class and implement best academic practices for your success at the university.
> (Key Explore Community Website, 2013)

The Key Explore Mentors serve as the Teaching Assistants for the Key Explore Seminar class.

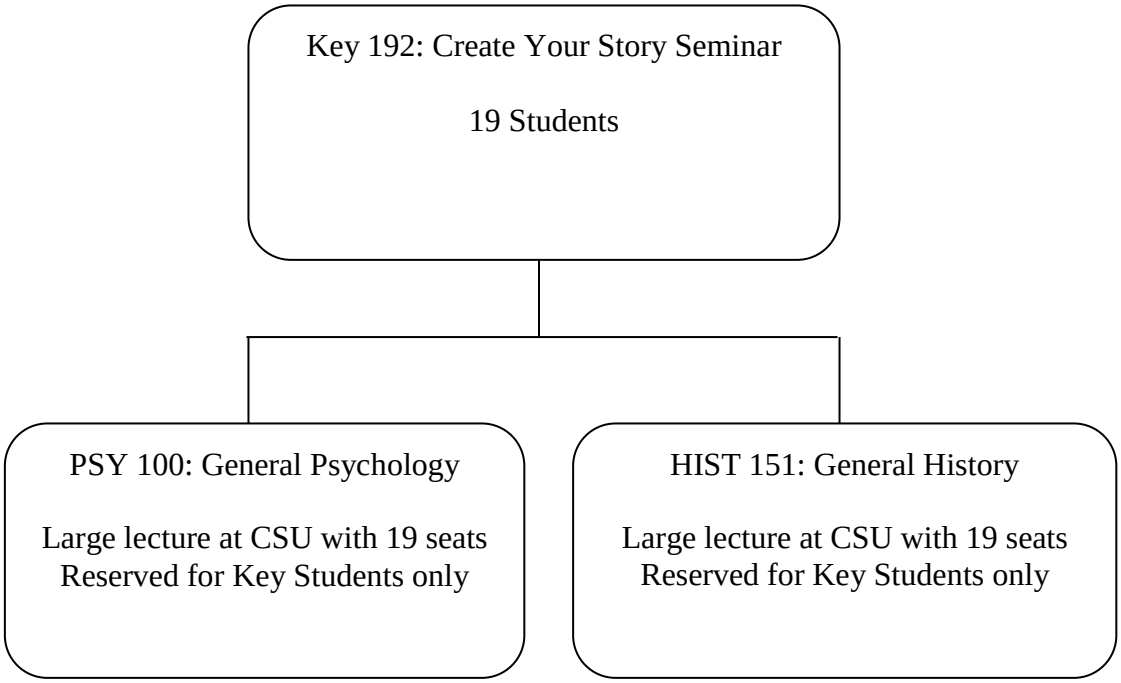
Key Explore students are also required to select two other Key Explore Cluster classes for the fall semester that fulfill the All University Core Curriculum. There are 19 spaces available for Key Explore students in each class available on a first served basis including a choice of: ANTH 100 Introduction to Cultural Anthropology, CO 150 College Composition, HIST 151 US History Since 1876, POLS 131 Current World Problems, PSY 100 General Psychology, and SOC 205 Contemporary Race-Ethnic Relations.

Many of these classes are larger university lecture classes, while KEY 192 is a small section comprised of only the 19 Key students registered for that cluster. Each of the classes, aside from KEY 192, within the clusters fulfills All University Core

Curriculum. The Key Explore Seminar class is required for participation in Key and will count as elective credit. In the spring semester Key Explore students will enroll in a one credit seminar course. An example of a Key Explore Community Cluster is pictured in Figure 3.

Figure 3

Key Explore Community Cluster Diagram



Key Explore students have the opportunity to participate in group study and library hours with other students enrolled in their Key Explore classes. Mentors can also provide referrals to tutoring opportunities available on campus. In addition, Key Explore students will attend workshops within the Exploration Program Series (EPS), which will help strengthen and support their time management, study skills, and career exploration.

First-time university students often find it very helpful to get the most detailed feedback possible on their academics and adjustment to residence life. Key Explore students have the opportunity to meet individually with program staff to review their academic progress and consider strategies for achieving their best performance. Mid-semester Academic Progress Conferences between the Key Explore Mentor and the student to discuss progress on the goals set at the beginning of the year related to academics, leadership, and community. Key Mentors will share grade feedback from professors during this meeting.

Key Explore program participation requirements.

Key Explore focuses on active learning through interdisciplinary classes, service-learning, academic and career opportunities, and leadership development. The goal is to support students in researching and gathering information necessary to create a foundation for the choices they will make for their academic and career paths. Key Explore students will have the opportunity to be involved with Key Community events, attend the Exploration Program Series, and interact with Key Explore staff.

This community was created to provide an opportunity for students who have yet to declare an academic major to assess and research their options in order to choose a major and possible career path. Key Explore is designed to aid the exploration of participant interests, experiences, identity and who they want to become. In order to support these goals, Key Explore students are required to attend one program a month, a total of ten throughout the academic year, on topics found in the Exploration Program Series (EPS). Topics may include personality and self-assessments, information from the

Career Center, lectures from faculty and staff about their passions and career paths, guest speakers on leadership opportunities, and academic and study skill workshops. The EPS program series is a collaboration between five departments on the Colorado State University campus.

Key Health Professions Community

The Key Health Professions Community is a first-year learning community of 74 students intentionally focused on the exploration of human and animal health professional fields and academic achievement. The students live together in Braiden Hall and enroll in three or four classes together. In this community, students take advantage of group study opportunities, leadership development, and opportunities to build connections with faculty, staff and students. Students will participate in required academic study skills, personal enrichment, and health professions interest workshops to provide support for researching and making choices with their academic, career, and leadership paths. The Key Health Professions Communities strive to create an environment committed to academic excellence, campus involvement, and a diverse and supportive environment. The Key Health Professions Coordinator and Mentors work with the Health Professions Advisors and Clubs, The Institute for Learning and Teaching (TILT), the Career Center, Student Leadership, Involvement and Community Engagement (SLICE), and the Office of Residence Life to create and sponsor additional programs and activities to help foster academic success and explore human and animal health interests. Each week, students are sent a KEYMAIL with information and updates for various events and programs occurring on campus.

Key Health Professions support staff.

Key Health Professions students work with an Academic Major Advisor within their academic department to ensure they are on track to meet graduation requirements. Key Health Professions students, along with any CSU student who is interested in health professions also works with Health Professions Advisors to ensure they incorporate the prerequisites for professional health programs into their major program of study. In addition, other faculty and staff may, from time to time, join Key Health Professions participants for a meal or attend a discussion in the residence hall.

The Key Health Professions Resident Assistants (RAs) play a vital role in developing and maintaining an atmosphere of academic, personal, and social growth in Braiden Hall. The RAs assist students with the transition to college, serving as a mentor during the academic year. The RAs also organize hall meetings and activities around the values of the Key Health Professions Community to bring residents closer together, inform residents of events in the halls and create a special bond or a sense of belonging for students.

Key Health Professions Mentors are student leaders on campus in their Junior or Senior year, many Key Alumni, who are excelling at the university. Key Mentors will work individually and collectively with Key Health Professions students throughout the year. Key Mentors serve as guides to students in their academic, leadership, and social transition to college. Whether leading sessions at Key Orientation, hosting goal setting workshops, providing tips on time management, note taking, study skills in college, or

referring students to various resources and opportunities on campus, Key Mentors are instrumental in developing a community based on personal connection.

Key Health Professions Mentors are assigned to each of the Key Health Professions designated seminar classes (LIFE 180 and KEY192), serve as Teaching Assistants for both of these classes, assisting students in evaluating their learning effectiveness, connecting students to campus resources and opportunities, and conducting mid-semester Academic Progress Conferences with feedback from your professors. Mentors help students set goals and monitor their academic progress.

Key Health Professions community clusters.

A Key Health Professions Cluster is a set of three classes into which Key Health Professions students enroll with 19 other students in the program. They are comprised of one of two sections of the Key Health Professions designated seminar courses: LIFE 180 – Bridging Chemistry & Biology with Health Issues. Each seminar section has 19 students enrolled and is an academically focused class designed specifically for first year students. Key Health Professions Mentors serve as the Teaching Assistant for the Key Health Professions Seminar class. The course focuses on themes such as chemistry, metabolism and molecular genetics. The goal of this course is to use inquiry-based exercises, readings and discussions centered around societal and health related issues to support the development of critical thinking and quantitative reasoning skills.

Key Health Professions students are also required to enroll in the same lecture section of LIFE 102 – Attributes of Living Systems and select a designated Key Health Professions lab section for LIFE 102. LIFE 102 is an introductory biology course

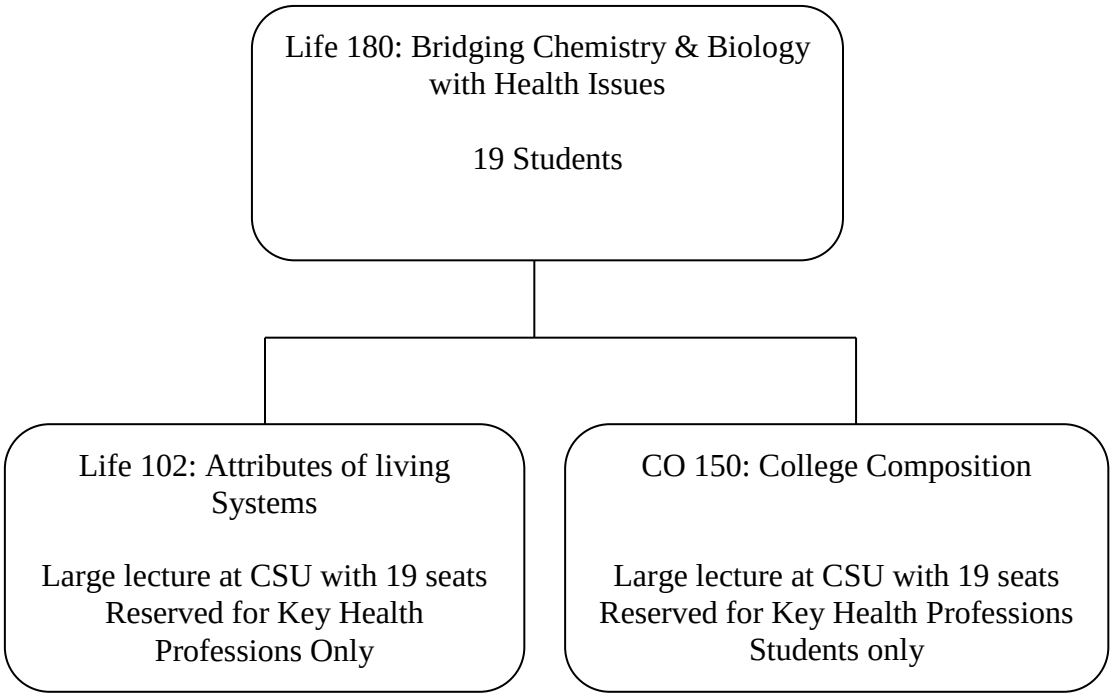
required by most science majors; is a part of the All University Core Curriculum; and is a prerequisite for many health professions programs. Since all Key Health Professions students will be required to take the same sections of LIFE 102, facilitated study groups for this class will be offered for Key students.

Key Health Professions students will also select at least one additional Key Health Professions Cluster course for the fall semester. There are a limited number of spaces available for Key Health Professions students in each class available on a first served basis including, but not limited to: CO 150 College Composition, MATH 155 Calculus for Biological Sciences, CHEM 111 General Chemistry I, CHEM 112 General Chemistry Lab, and SOC 105 Social Problems in Contemporary Society. Many of these classes are larger university lecture classes, while LIFE 180 is a small section comprised of only the 19 Key Health Professions students registered for that cluster. Each of the classes within the Clusters, aside from LIFE 180, fulfills All University Core Curriculum. The Key Seminar class is required for participation in Key Health Professions and will count as elective credit. An example of a Key Health Professions Community Cluster is pictured in Figure 4.

Key Health Professions students have the opportunity to participate in group study and library hours with other students enrolled in their Key Health Professions classes. Key Health Professions Mentors can also provide referrals to tutoring opportunities available on campus. In addition, Key Health Professions students will be given the opportunity to attend workshops to help strengthen and support their time management, study skills, and career interests.

Figure 4

Key Health Professions Community Cluster Diagram



First-time university students often find it helpful to receive detailed feedback regarding their academics and adjustment to residence life. Key Health Professions students have the opportunity to meet with program staff to review progress and consider strategies for achieving their best performance. Mid-semester Academic Progress Conferences are individual meetings with your Key Health Professions Mentor to discuss student progress on goals set at the beginning of the year related to academics, leadership, and community. Key Mentors will share grade feedback from professors during this meeting.

Key Health Professions program participation requirements.

Key Health Professions focus on active learning through interdisciplinary classes, service-learning, academic and career opportunities, and leadership development. The goal is to support students as they research and make choices for their academic major, professional career, and leadership paths. Key Health Professions students will have the opportunity to be involved with Key Community events, attend health professions interest workshops, and interact with Key Health Professions staff.

This community was created to provide an opportunity for students to learn more about and explore human and animal health professions career interests, as well as provide overall academic support to students exploring health professions. In order to support these goals, Key Health Professions students will do the following tasks at the beginning of the Fall semester: Attend Ram Serve day of service events, participate in Key Health Professions Sponsored service events, meet with a Key Health Professions Advisor for pre-professional guidance at least once each semester, and attend at least three health professions interests programs per semester.

Key Plus Community

Key Plus is an academically focused living learning community for second-year students at CSU that works with these students to develop strong leadership and career decision-making skills. Key Plus is an optional program for students who participated in the Key Academic, Key Service, Key Explore or Key Health Professions Communities during their first year at Colorado State University. Key Plus participants can apply to participate in one of two tracks: the Key Plus Learning Community or the Key Plus Leaders Engaged in Academics, Diversity and Service (LEADS) Community.

The Key Plus Learning Community is an opportunity for a limited number of participants. Students must apply and be selected to participate in the program. There is an affiliated 1-credit class within the Learning Community and students have first option to live in the new 4th floor Braiden Lofts. However, students may also live off-campus and be involved in the Key Plus Learning Community by taking one of the affiliated 1-credit courses.

The Key Plus LEADS Community is an opportunity wherein participants, whose schedules during their first-semester of their second-year may prevent them from participating in the Key Plus Learning Community courses, do not enroll in the affiliated classes but do live in the new 4th floor Braiden Lofts. Students in the LEADS Community are required to participate in 20 hours of leadership activities each semester. There are a limited number of spaces available in the LEADS Community. Students are able to select spaces on the floor after Learning Community students have signed up.

The goals of the Key Plus Community are to: promote and achieve academic success; develop and demonstrate leadership skills through service to the campus and community; appreciate and understand differences in background, experience, and culture; and develop and maintain a community of students and staff that is supportive of success.

Key Plus support staff.

Key Plus students have the opportunity to connect individually with seminar instructors, faculty, and staff members. From time to time faculty or staff members may join Key Plus students for a meal or attend campus and hall programs.

The Key Plus Resident Assistants (RA) play a vital role in developing and maintaining an atmosphere of academic, personal and social growth in Braiden Hall. They assist students with the transition to the second year of college, serving as student program coordinators and friends during the academic year. RAs organize hall meetings and activities around the values of the Key Plus Community to bring residents closer together, inform residents of events in the halls and create a special bond and a sense of belonging for students.

Key Plus has less structure than the first-year Key Communities, but continues to provide a connection and support for Key students in their second-year of college. Thus, the Student Coordinator staff in the Key Plus program serve as guides to students in their academic, leadership, and social success in college. Key Plus staff also assist students to create semester goals, leadership development plans, connect students to campus resources and opportunities, and provide mid-semester feedback from professors. Key Plus staff members also create orientation and retreat workshops, visit class sessions, and organize academic and social programs for student involvement. In addition, the Key Plus Coordinator, a full time professional staff member, is an additional resource for Key Plus students.

Key Plus community clusters.

The Key Plus Learning Community Cluster offers a limited number of students the option of either living on- or off- campus while enrolling in an one credit, eight week long course specifically for students in the Key Plus Learning Community. Students can select from the following course options: Academic and Career Decision-Making,

Leading with Authentic Purpose, Leadership in Higher Education: Diversity, Leadership in Higher Education: Service, and Engaging in Scientific Research. All five courses are focused on the intentional growth of leaders with an emphasis on career and personal development and leadership. Each course will have an enrollment limit of 20-25 students.

The Key Plus Leaders Engaging in Academics, Diversity, and Service (LEADS) Community Cluster enables participants to connect with one another as residents of the Braiden Lofts while immersing themselves in leadership opportunities across campus. LEADS Community students do not have to take classes together but they are required to participate in 20 hours of leadership activities each semester. LEADS Community students are encouraged to be involved with the following projects: The Dream Project, Campus Corps, President's Leadership Program, First-Year Mentoring programs, Alternative Spring Breaks, Associated Students of Colorado State University Government, and others.

Key Plus program participation requirements.

Commitments of Key Plus Community students include but are not limited to: maintaining a cumulative GPA above 2.0, attending the Fall Key Plus Orientation events in August, participating in signature Key Plus programs such as the Key Plus Welcome Session, the Key Plus Induction Ceremony, and the Key Plus Spring Kickoff Reception, participating in a Leadership Retreat, and be a positive representative, and conducting themselves on- and off-campus in a way that positively contributes toward developing a community based on academic success, civility, and respect.

Summary of Chapter III

In this overview, I illustrated the Key Community programs in which the research population is currently participating. Though there are differences between the objectives and structures of the individual first-year Key Academic Communities, the similarities allow for a relatively similar first-year experience. In Chapter III, I also described the second-year Key Plus program that serves as the quasi-dependent variable the research population will self-assign based upon their decision to either apply to Key Plus (Applicants) or not apply (Nonapplicants). In Chapter IV the methodology for the research will be explained.

Chapter IV - Methodology

In March of their first spring semester, participants in the CSU's first-year retention program, the Key Communities, were informed of an opportunity to apply for participation in the second-year retention program, Key Plus. Some eligible first-year students chose to apply to the second-year retention program but a greater number chose not to apply. The purpose of this study is to determine *the characteristics* of first-year students who chose to apply to participate in second-year retention programs and *why* they chose to apply.

This research was conducted using a Mixed Methods – Explanatory Design: Follow-up Explanations Model (Cresswell & Plano-Clark, 2007). This mixed methods model required quantitative data to be collected and analyzed prior to a qualitative phase of data collection and analysis. This method allowed the qualitative data collection to expand upon questions that arose during the analysis of quantitative data. Cresswell and Plano-Clark's (2005) research design was modified for this research to accommodate a second quantitative phase of data collection. The research required two phases of quantitative data collection and one phase of qualitative data collection.

Data Collection Phases

Phase I required quantitative data collection and analysis, using Fisher's exact test (Armitage & Berry, 1994) to generate an enhanced understanding of the relationship between participant application status, Applicant or Nonapplicant, and participant demographic and academic variables.

Phase II entailed quantitative data collection of participant demographic, academic, and noncognitive variables, through the distribution of the Noncognitive Questionnaire (NCQ) to a systematic random sample (Hartas, 2010) of the research population. Analysis of these variables, using Fisher's exact test, determined the relationship between participant application status and participant demographic, academic, and noncognitive variables.

Phase III, the qualitative phase, required two scripted focus group interviews to be conducted with a disproportionately stratified random sample (Hartas, 2010) of five to eight students per group. One group was comprised of applicants to the second-year retention program, Key Plus, and the other group was composed of Nonapplicants. The data analysis was conducted using open, axial, and selective coding procedures.

This chapter will explain, in detail, the research process used in this study, including an explanation of the research design, a description of the sample population, the procedures and instruments to used for data collection, and the process for data analysis.

Research Questions

This study answered the following research questions through a mixed methods explanatory research design:

1. What are the characteristics of students who apply to participate in a second-year retention program?

2. What student noncognitive variables reflect which students apply to participate in a second-year retention program?

3. What factors do first-year students consider when determining whether or not they will participate in a second-year retention program?

Research Design

After reviewing a variety of quantitative, qualitative and mixed methods research designs, I selected an explanatory mixed methods research method. This design best facilitated an in-depth investigation of the research questions by means of qualitative data collection after a quantitative data gathering phase. This process allowed the qualitative data collection to build upon the information gathered in the quantitative phase (Cresswell & Plano-Clark, 2007).

While quantitative research enabled the identification of characteristics of second-year retention program Applicants and Nonapplicants, such information would not be useful to universities without a rich qualitative understanding of *why* students chose to apply or to not apply and what they wanted from their second-year experience. It is impractical to quantitatively study *why* students apply to a second-year retention program when the response has the potential to be unique and complex to each research participant.

Qualitative research, specifically focus group interviews, allowed for open-ended responses from participants and for interviewer follow-up when responses seemed incomplete or the response was not clearly understood. As Maxwell (2005) states, “the researcher is the research instrument in a qualitative study”, meaning that any observed responses (e.g., verbal tone and pitch, hand or body gestures, emotional responses, etc.)

from the research population may have meaning and the researcher should use observations to redirect questions in order to further clarify participant responses.

In short, neither traditional quantitative nor qualitative research methods alone could effectively answer the research question in a manner that would be most useful to practitioners. The mixed methods explanatory research design allowed for the collection of quantitative data and an analysis of the results, identifying quantitative trends or anomalies. Then, using the quantitative results as a guide, I maximized the effectiveness of the qualitative phase of research such that the unexplained trends or anomalies were identified and studied along with the trends identified by previous research in the literature review and theoretical framework. As noted in Cresswell and Plano-Clark (2007), this method took advantage of the benefits inherent to both quantitative and qualitative analysis, while creating research findings that were more practical for university professionals to implement.

Instrumentation.

Two data collection instruments were utilized for this research, the Noncognitive Questionnaire and the Focus Group Interview Questions. These were selected for their applicability to this research, their ability to be adapted to the research, and the demonstrated reliability and validity of their implementation.

According to Sedlacek, “the noncognitive assessment model has been developed over more than thirty years of research and practice” (2004, p. 35). The model was developed with the intention of establishing valid and reliable measures to predict college success of diverse groups. Noncognitive variables were related to variables relating to

adjustment to, motivations to attend, and perceptions of students to the college environment. These noncognitive variables differ from the traditional cognitive variables measured by standardized tests. Nontraditional students, including Students of Color and First Gen students, require different metrics when assessing their ability to succeed in college, as cognitive measures have been demonstrated to be poor measures for these students (Boyer & Sedlacek, 1988; Sedlacek, 1989, 2004; Ting, 1998; Tracey & Sedlacek, 1985, 1987, 1989; White & Sedlacek, 1986). Considering the higher ratio of SOCs and First Gen students to traditional students in the Key Communities as compared to the general first-year population, an assessment tool was required that was reliable and valid for traditional and nontraditional students. The Noncognitive Questionnaire met both requirements.

The Noncognitive Questionnaire (NCQ) was designed expressly to measure the eight noncognitive variables identified as relevant to predicting college success. The NCQ has been demonstrated to have construct validity (Ting & Sedlacek, 2000; Tracey & Sedlacek, 1984) and reliability in the prediction of grades, retention and graduation for both traditional and nontraditional students (Boyer & Sedlacek, 1988; Sedlacek, 1989, 1996a, 1996b; Ting, 1998; Tracey & Sedlacek, 1985, 1987, 1989; White & Sedlacek, 1986). Furthermore, the NCQ has been scored at between .74 and .94 in a two week test-retest reliability. Interrater reliability on scores from open ended NCQ items ranged from .73 to 1.00 (Sedlacek, 2004). With a documented record of validity and reliability, the final criteria that made the usage of the NCQ a good fit for this research was the flexibility of the instrument.

As Sedlacek notes, several forms of the NCQ have been developed and implemented (2004). Of particular relevance to this research was the NCQ-2 Version found in the appendix of *Beyond the Big Test: Noncognitive Assessment in Higher Education* (Sedlacek, 2004). This version of the NCQ was comprised of 29 questions (see Appendix C), which meant that the survey would take no more than 15 minutes and would not be likely to overburden the participants. It also included an answer key (See Appendix D) which allowed the researcher to base the coding of results on a specific set of guidelines. The answer key included rubrics for the evaluation of open ended questions, further allowing the researcher to ensure the variance between the intended evaluation of responses of the author and the evaluation of responses by the researcher was minimal.

The qualitative instrument of data collection in this study was comprised of the focus group interview questions. Qualitative data allows for a depth of understanding of a research topic that is difficult to match in quantitative based analysis. For this reason, I implemented a mixed methods approach was implemented for this research. The focus group interview questions were designed to supplement the data generated by the quantitative data and its flexibility allowed for this to occur. However, there are realistic concerns that qualitative data may be interpreted to have different meanings depending upon the interpreter.

In order to ensure the interview questions were as reliable and valid as possible, I conducted pilot tests of the scripted questions with two different populations of students similar to the actual research population. With the first pilot group of four first-year

students, I asked the questions as if it were an actual interview: a similar room, in similar conditions (including food and drinks), and delivered it as if in the actual interview. As the interview progressed I noted where participants required the question to be asked multiple times and when the responses did not seem to connect with the intention of the question. Following the interview, I revisited some of these noted questions to ask the pilot group, how to alter the questions to ensure they accurately reflected the intention of the questions and that the responses would be repeatable over multiple interviews. A second pilot study followed, in the same setting as the first, but with the revised questions. With only one revision to the interview script, the focus group interview questions were satisfactory for the purpose of the research.

The flexibility of semiscripted focus group interviews lay in that the interviewer could ask follow-up questions and encourage participants to share hinted at thoughts or concepts that were not fully developed in order to gain a fuller understanding of the research questions. However, it was important that the foundation of the interview questions remain consistent, interview-to-interview, in order to ensure valid and reliable data was collected.

The instruments for this research, the NCQ and focus group interview questions were evaluated, tested, and implemented in a manner that, as best as possible, ensured that these instruments were reliable and valid measures of the research objectives.

Reliability and validity.

Though the concepts of reliability and validity were originally applied to quantitative research, these quality measures are also important to explore within the

context of qualitative research (Maxwell, 2005; Miles & Huberman, 1994). While reliability and validity in quantitative research often refer to the instrument being used to assess a phenomenon, in qualitative research, the instrument is often the researcher (Maxwell, 2005). As a result, questions regarding qualitative validity and reliability are generally centered on the ability of the researcher as the primary instrument (Miles & Huberman, 1994). One aspect of qualitative validity to address is researcher bias or the influence of the beliefs and values of the researcher/instrument upon the research itself. As Maxwell (2005) stated, "validity in qualitative research is . . . the result of integrity" (Maxwell, 2005). The researcher for this study was interested in determining outcomes that were beneficial to practitioners and researchers and made his best effort to conduct the research with integrity for the benefit of others.

Lewis (2003) suggested that qualitative research should ensure that study participants are representative of the population. I addressed this concern through the use of a disproportionate stratified random sampling method which minimized the chance of randomly selecting a population that did not represent the research population.

Validity is often defined as the level to which findings are correct or precise (Lewis, 2003). Cresswell and Plano-Clark (2007) suggest a number of strategies to ensure the validity of a qualitative study including the triangulation of data, where codes are developed from several sources or individuals. Cresswell and Plano-Clark also propose the reporting of disconfirming evidence or information that is contrary to one established by other evidence. They also advance the concept of peer review by people familiar with

the content area and qualitative research, yet are not affiliated with the project. By using these mechanisms, the researcher takes steps to ensure the validity of the research.

Strengths.

Mixed Methods research is a pragmatic approach to investigating research problems and is often the best way to address complex research questions. Cresswell & Plano-Clark (2007) note that "it allows a researcher to measure trends, prevalences, and outcomes and, at the same time, examine meaning, context, and process" (p. 175). Mixed methods research designs are not as restrictive to researchers as conducting research using purely quantitative or qualitative approach and allow for a deeper understanding of some research problems. Mixed methods research designs are more reflective of the means in which professionals collect and synthesize data in practice and may make the findings more relevant and usable by the professional practitioner. Mixed method designs may also make the research more persuasive through the combination of numbers and narrative, helping to bridge the gap between research and practice.

Limitations.

Feyerabend (2010) makes an effective argument in *Against Method* that all methodologies, even the most obvious ones, have their limits. While offering certain research benefits in the merging of quantitative and qualitative research, mixed methods research design also takes on the limitations of both research methods. Overall, the demographic composition of the research population, the size of the CSU, its residential to nonresidential student ratio, the region where the CSU is located, or CSU's status as a

public land grant institution may prejudice the results, making them unsuitable for comparison with other institutions.

Omission bias, where certain groups are omitted from the sample, can be countered through systematic random sampling and disproportionately stratified random sampling, however, sampling practices cannot account for participant attrition.

I addressed procedural bias by providing participants ample time in both the quantitative and qualitative phases of the study. I offered surveys electronically, with a two week response time frame. Focus group interviews, while scheduled for 90-120 minutes, could have gone longer if the participants wished to continue and the discussion was germane to the focus group interview script.

Quantitative limitations.

Quantitative research may, but is not likely to, result in findings that differ significantly from the rest of the research population. In order to minimize the chances of statistically anomalous results, I distributed the Noncognitive Questionnaire (NCQ) to the majority of the research population, with the desired goal of a 20% response rate from a sample of 193 participants. Ultimately, there were 49 respondents, a response rate of 25.4%. Financial compensation, in the form of $25 Visa Gift Cards, was given to three of the NCQ survey participants through a random drawing in an effort to increase the response rate.

The use of financial compensation may have created a research bias toward students in greater financial need. Known as a nonresponse bias, this occurs when respondents differ in meaningful ways from nonrespondents. In this instance, students

who had financial need may have been more likely to participate in the study than students who did not have financial need, therefore biasing the responses. While a concern, the financial compensation offered was not excessive and was not promised to all respondents. Only the opportunity to be entered into a random drawing was offered.

In order to ensure this research was conducted in accordance with current research compensation best practices to minimize nonresponse bias, I contacted a representative of the University of Texas at Austin Human Subjects and Institutional Review Board. In a phone conversation with IRB Program Coordinator Schuyler Nelson-Brown (personal communication, December 23, 2012), he explained that financial compensation is not uncommon nor inappropriate so long as it is in line with the financial compensation for someone with the participant's qualifications. Considering the length of the interviews and their current minimum wage rate, the IRB Program Coordinator, felt the compensation for this research was appropriate in order to offset the risk of not achieving a 20% survey response rate.

Measurement bias was minimized in the quantitative Phase II of research through the use of the Noncognitive Questionnaire (NCQ). Its reliability and validity have been established both statistically (Ting & Sedlacek, 2000) and in the volume of research citing use of NCQ (Ancis, Sedlacek, & Mohr, 2000; Jones, 2010; Sedlacek, 1993, 1996, 2004; Ting, 1998, 2009). Sampling bias was addressed through the use of a systematic random sampling procedure during Phase II quantitative data collection.

Qualitative limitations.

Qualitative research offers deeper insight into the questions being researched, but is subject to various biases. The small sample size of the focus group interviews may limit the reliability and generalizability of the results. I acknowledge this limitation as part of the nature of qualitative research. Focus group interviews are a time intensive research method that decreases the number of participants who can be interviewed during the data collection time frame. However, the depth and richness of the responses to qualitative research make the risk acceptable.

In the qualitative phase of data collection, compensation was offered to participants in the form of $25 Visa Gift Cards and refreshments in order to increase the number of focus group participants. As stated in the quantitative limitation section, the use of financial compensation may create a nonresponse bias toward students in greater financial need. While a concern, the financial compensation offered is not excessive.

Further, the implementation of a disproportionate stratified random sample, minimized nonresponse bias by creating a sample pool of students willing to participate in the focus group interviews. In creating a pool of student participants, representative of the research population, the risk of students with greater financial need choosing to participate in interviews, while students with little financial need may have decided not to participate, the chance was smaller than if the entire research population was offered the chance to participate. Such a scenario, while offering the increased chance of achieving four full focus group interviews, also increased the likelihood of drawing a disproportionate number of participants with financial need. The stratified random sample increased the chance of not filling all interview sessions, but also minimized the

chance of having interviews with a high number of students with financial need. The researcher accepted the risk that fewer interviewees would participate in order to minimize the effects of nonresponse bias.

The refreshments, pizza and bottled water, were offered due to the length of the focus group interviews and the fact that the interviews were conducted during the time many students would have been having their evening meal. While the refreshments may be considered a nonresponse bias, I considered the risk to be acceptable in order to increase focus group interview participation.

Measurement bias for qualitative analysis was minimized by fostering an interview setting that encouraged participant sharing of their personal perspectives. The interviewer explained that he was not affiliated with Colorado State University and that the responders were to select pseudonyms to identify themselves during the interview. Therefore, if their specific statements were quoted in the research results, no one would be able to assign the quote to the participant. Further, my responses to participants during the focus group interview were polite, encouraging, and neutral toward all responses.

Qualitative sampling bias was addressed through the use of a disproportionately stratified random sampling technique in the qualitative phase of data collection in order to minimize omission of research population groups.

Interview bias was diminished through two pilot studies wherein the interviewer held test interviews with groups of students, similar in age and college experience to the proposed focus group participants, and practiced delivery of the interview questions with a neutral tone, body language, and demeanor (Maxwell, 2005). Also, the pilot studies

were used to assess how accurately the predetermined, focus group interview questions assessed the intended objective of the focus group questions.

My previous experience in facilitating focus group interviews helped me to effectively conduct the focus group interviews for this research. CSU staff or students with whom the participants may have been familiar could have conducted the interviews, but there were potential response biases in this option. First, this research sought to elicit responses that were genuine and honest. If the participants were familiar with the interviewer, they may have offered responses that were less critical of CSU than they might have with an outside interviewer. Second, the bias of social desirability, or the tendency of people to present themselves in a more favorable light may have been enhanced if the interviewer was familiar to the participants.

An outside consultant could have been contracted to conduct the interviews, but this also raised concern. Focus group interviews may lead to tangents that go outside the boundaries of this research inquiry, even with prescripted questions. I had a familiarity with the research material, knowledge that allowed me to know when the discussion needed to be ended, guided back to germane material, or if there was more that needed to be unearthed. A consultant was unlikely to have the required depth of knowledge regarding the research to capably administer the focus group interviews.

Responses from all participants were followed with a response of “thank you”, from the researcher to discourage students from attempting to understand what the researcher wanted to hear and inserting a response bias into the research.

Site selection.

The site for this research was Colorado State University, a large, primarily residential, four year, selective, public, land grant institution in the Western United States. This site was selected for the structure of its second-year retention program and my familiarity with CSU's Key Community and it's organizational and programmatic structure. Applicants for the second-year retention program must be participants in one of the four first-year retention programs during the 2012-13 academic year. The themes of the four first-year retention programs are: Academic, Service, Major Exploration, and Health Professions. The first-year retention programs are similarly structured, as noted in Chapter III, with the primary difference between them being the theme of the program. These first-year retention program participants, 337 for the 2012-13 academic year, comprised the research population.

In January 2013, CSU began marketing the opportunity for the research population, and only the research population, to apply to and participate in, Key Plus, the second-year retention program for the 2013-14 academic year. Applications were due March 22, 2013 though, in special circumstances, late applications were accepted.

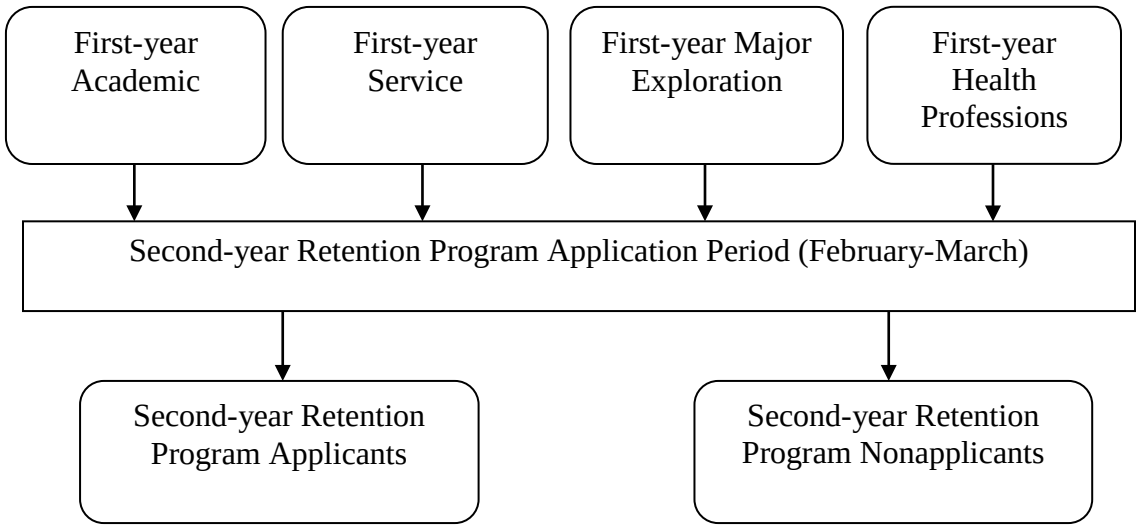
The first reason CSU was selected as a research site was the Key Community's program structure. Investigation, through internet research and personal communication, of other universities with second-year retention programs found many did not have a structure where the decision to apply or not apply could be reasonably separated between the participant's personal or academic attitudes or needs and the environmental and experiential differences of their first-year experience.

For example, one university offered the opportunity to participate in a second-year retention program to all rising second-year students at the institution, regardless of first year program participation. Therefore, the participants' decisions to apply or not apply to the second-year retention program may be due to the differences in their first-year experiences, some students in first-year retention programs and some without first-year retention program experiences and not the variables being studied in this research.

Another university's retention programs were organized in a decentralized manner with only some academic colleges offering second-year retention programs. The participants in one college's first-year retention programs and second-year retention programs had little interaction with those of another. This left very small, 20-40 students each, research populations with similar first-year retention program and second-year retention program experiences.

Figure 5

Research Population Diagram



CSU first-year retention programs are operated in a manner that, aside from the themes of their specific program, the students have similar first-year experiences. The participants of all four programs share residence hall floors, attend CSU program-wide events including all four first-year retention programs, have similar peer mentorship and academic environment experiences (Figure 1) and are administrated from the same CSU office (Colorado State University Website, 2012). A secondary reason for the selection of CSU as the site for this research was the CSU's agreement to share demographic, precollegiate academic, and collegiate academic data of the research population with the researcher.

Research population.

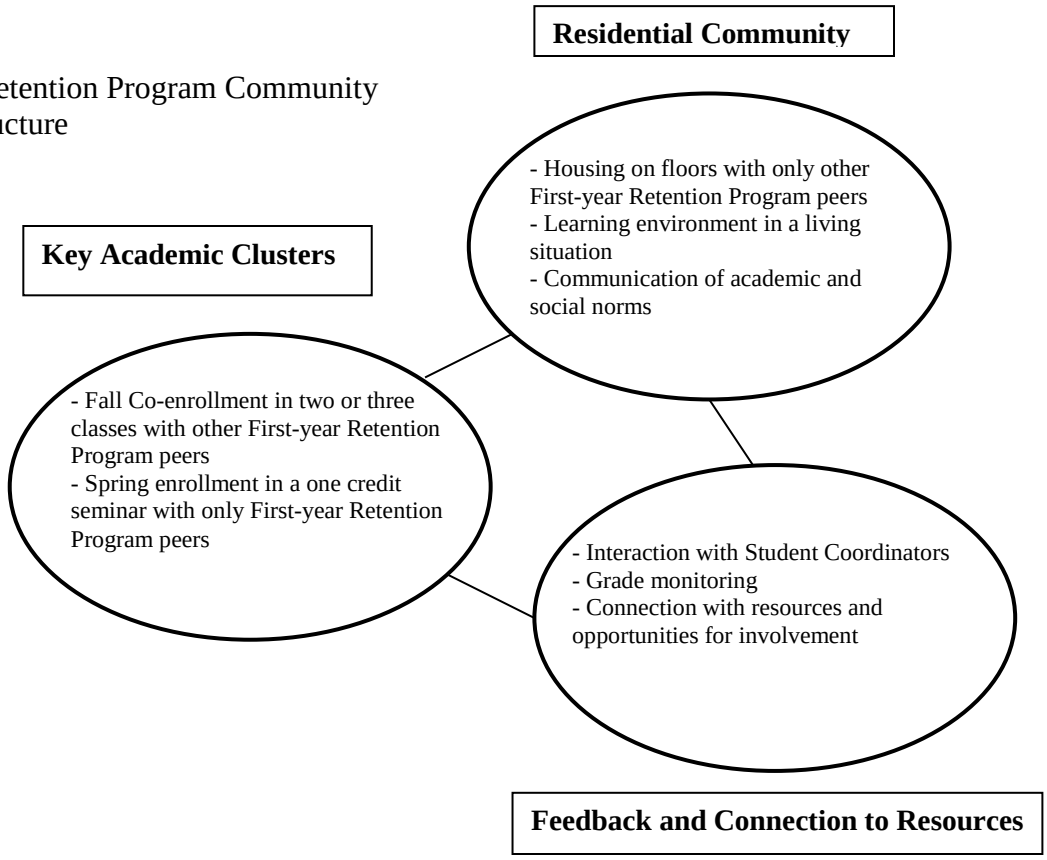
The research population was comprised of the 337 first-time first-year students at Colorado State University, a large, primarily residential, four year, selective, public land grant institution in the Western United States, who chose to participate in one of four Key Communities, first-year retention programs, during the 2012-13 academic year. All were first-year students in their second semester at the CSU and were participants in good standing in the first-year retention program.

Participants in the Key Communities first-year retention programs had similar experiences in one of the four communities: Academic, Service, Major Exploration, and Health Professions. The communities were structured so the participants in each community were supported in three component areas: Academic Achievement, Residential Community, and Peer Mentorship (Colorado State University Website, 2012). The participant experiences were similar excepting the theme of the first-year retention

programs. Therefore, unanticipated variables that may affect the decision making process for student application to the second-year retention program were minimal.

Figure 6

First-year Retention Program Community Support Structure



Research participant self-selection as Applicant or Nonapplicant.

Until the Key Plus application collection closed on March 22, 2013, the research population had not been assigned to one of the two quasi-dependent variables, Applicant or Nonapplicant. All Key Community first-year retention program participants were eligible to submit an application to Key Plus, the second-year retention program. Participants who chose to submit an application were assigned to the Applicant group. Those who did not apply to the second-year retention program were assigned to the Nonapplicant group. Applications that were accepted late were removed from the

research population. The decision to apply or not apply was made by the students without influence from the researcher. A randomly generated General Identification Number (Gen ID) was attached to the profile of each Key Community 2012-13 participant on March 8, 2013 by the researcher's data liaison at CSU. Any student ruled ineligible to participate in the second-year retention program, for any reason, they were ineligible to participate in this study.

Phase I quantitative data collection process.

Phase I data was maintained by CSU for all students and was collected and updated within CSU databases. The Gen ID was connected to the data points by the CSU data liaison and was used to link Phase I data with Phase II data. This linkage took place with all data with the exception of Pell Eligible information. On March 24, 2013, designated biographical, precollegiate academic, and collegiate academic data on all students in the research population was obtained through coordination between the researchers and a CSU Clinical Researcher and the data liaison for the Key Communities and Key Plus, in an Excel spreadsheet format. The data was processed by hand to fit the criteria established in the *Phase I Data Fiel*ds (Table 3) to ensure the data was in a categorical format conducive to Fisher's exact test analysis. Once data was collected, cross tabulation tables were generated for each of the Phase I data fields to identify the characteristics of the research population.

Phase II quantitative data collection process.

Consistent with systematic random sampling practice (Hartas, 2010), the entire research population's Gen ID, gender, and first-year retention program affiliation were

Table 3

Phase I Data Fields

Data Field	Response Coded Categories	Response Code
General ID	Open	N/A
Gender	Male	1
	Female	2
First-year Retention Program Affiliation	Academic	1
	Service	2
	Major Exploration	3
	Health Professions	4
Ethnicity	Asian-American	1
	African-American	2
	Native American/Pacific Islander	3
	Hispanic	4
	Caucasian	5
	Multiple Ethnicities	6
First Generation Student	Yes	1
	No	2
University Admissions index Score	95 and Below	1
	95-105	2
	106-115	3
	116-125	4
	126 and Above	5
High School Grade Point Average	2.0 and Below	1
	2.01 – 2.5	2
	2.51 – 3.0	3
	3.01 – 3.5	4
	3.51 – 4.0	5
High School Class Rank	25% and Below	1
	25.1% - 50%	2
	50.1% - 75%	3
	75.1% - 100%	4
College Grade Point Average	2.0 and Below	1
	2.01 – 2.5	2
	2.51 – 3.0	3
	3.01 – 3.5	4
	3.51 – 4.0	5
Number of Credits Hours Completed During Semester 1	Less than 8	1
	9 – 11	2
	12-14	3
	15-17	4
	18 or More	5

entered into an Excel computer spreadsheet to establish the Systematic Random Sample List. The data in this list was sorted by gender, then by first-year retention program affiliation, and then by Gen ID.

On March 10, 2013, two weeks prior to the Key Plus application deadline, a sample was drawn from the Systematic Random Sample List. Every other name on the Systematic Random Sample List was assigned to the Phase II research pool and removed from the List. Next, every 5th remaining name on the Systematic Random Sample List was assigned to the Phase II research pool. Finally, every 10th remaining name on the Systematic Random Sample List was assigned to the Phase II research pool. All members of the Phase II Research pool were sent an email (Appendix A) with a link to the Electronic Survey, an embedded Electronic Survey Consent Form (Appendix B) and the Noncognitive Questionnaire (Appendix C) by the Clinical Researcher on behalf of the researcher inviting them to participate in the NCQ. The NCQ was administered through Survey Monkey electronic survey software. The participants were given two weeks to complete the survey online. One electronic reminder email was sent to all selected participants who had not completed the NCQ through the Clinical Researcher. Participants were notified in all correspondence that their completion of the NCQ entered them into a random drawing for one of three $25 Visa gift cards. Once the survey was closed, three participants were randomly identified and gift cards were made available to them at the CSU first-year retention program administrative office.

Permission for use of Phase II survey tool.

Permission was requested from Dr. William Sedlacek on September 22, 2012 to use the Basic Noncognitive Questionnaire (NCQ), found in Appendix 2 of *Beyond the Big Test. . . an alternative approach* (Sedlacek, 2004), and granted on September 24, 2012 (personal communication, September 24, 2012).

Phase II data fields.

The NCQ survey was sent to the research population to determine the relevance of various noncognitive variables in their lives as the second-year retention program application process opened.

- Positive Self-concept or Confidence
- Realistic Self-appraisal
- Understands and Deals with Racism
- Prefers Long-range Goals to Short-term or Immediate Needs
- Availability of Strong Support Person
- Successful Leadership Experience
- Demonstrated Community Service
- Knowledge Acquired in a Field

Responses were hand coded in accordance with NCQ instrument procedures (Appendix D) using Microsoft Excel software. Results were be linked to the participants Phase I data using their Gen ID in Microsoft Excel.

Phase I and Phase II quantitative data analysis.

Due to the categorical nature of the data collected, a nonparametric testing mechanism, like chi square analysis, was necessary (Hartas, 2010). However, the small sample size (*n*) and the multiple categories to be evaluated (i.e., Asian-American, African-American, Native American, Hispanic, Caucasian, Multiple Ethnicities) made it likely that the use of chi square would be problematic. As noted in Armitage (1994), in cases where 20% of the categories will have an expected value of less than five, Fisher's exact test should be implemented. For the sake of consistency, rather than conducting chi square analysis where appropriate and Fisher's exact test in analyses where chi square was not appropriate, Fisher's exact test was used in all instances. STATA quantitative

statistical analysis software was used to analyze the data as it is a trusted and reliable quantitative data analysis tool.

Quantitative data analysis was conducted using Fisher's exact test in comparing the quasi-dependent variables, Applicant and Nonapplicant status, to the independent variable data collected in Phase I and the independent variable data collected in Phase II. Fisher's exact test was applied as the statistic of analysis for examining the quasi-dependent variable, Participant Application Status with the independent variables.

Table 4

Fisher's Exact Test 2x2 Frequency Table and Probability Formula

	B	B1	
A	a	c	a+c
A1	b	d	b+d
	a+b	c+d	a+b+c+d

[1] $$P = \frac{(a+c)!\,(b+d)!\,(a+b)!\,(c+d)!}{n!\,a!\,b!\,c!\,d!}$$

Fisher's exact test calculated the probability of getting a 2x2 table as great as or greater than the observed table (Ghent, 1972). The formula for Fisher's exact test (1972, p. 18) for a 2x2 table, where P is the probability of obtaining observed frequencies; a, b, c, d are the categorical frequencies observed, and n is the sample size, is seen in Table 4. For each Fisher's exact test conducted in this study, the level of significance was set at 0.1, or p

[1] All Fisher's exact test tables are included in accordance with APA 6 format guidelines for quantitative data tables.

< 0.1 for a two-tailed test. All statistical analyses were performed using the STATA quantitative statistical analysis software package.

The nature of the data collected required the use of Fisher's exact test to calculate the probability of getting 2x3, 2x4, 2x5, and 2x6 tables greater than or less than the observed table for a dependant variable with up to 6 variables. Ghent (1972) authored a paper that explained the method for exact testing tables this size. The calculations for exact testing grow increasingly difficult when adding additional columns to the 2x2 tables. STATA, the quantitative software package used to conduct the statistical analyses renders full comprehension of the math unnecessary. The format of all of the 2x2, 2x3, 2x4, 2x5, and 2x6 frequency tables to be used in this research have been included in Appendix J.

Phase I quantitative data analysis.

Once participants were grouped as Applicants and Nonapplicants, Fisher's exact test was conducted to determine whether a relationship existed between the quasi-dependent variables and the dependent variables. Independent variables included: gender, ethnicity, First Gen status, Pell Grant eligibility, University admission index score, high school grade point average, high school class rank, college cumulative grade point average, declared major, and college credits earned (Figure 3). As an example of the process, gender analysis was conducted using fictitious data.

Step 1 – Identify frequency of responses.

Once the populations were established, the number of sampled males, females, Applicants and Nonapplicants were identified and entered into the frequency distribution matrix as shown in Table 5.

Step 2 – Establish hypotheses and a level of significance.

The null hypothesis or H_0: for college students participating in a first-year retention program, there was no relationship between gender and second-year retention program application status. The alternative hypothesis or H_A: for college students participating in a first-year retention program, there was a relationship between gender and second-year retention program application status. For this research project all Alpha Levels or $\boldsymbol{\alpha}$ were equal to 0.1.

Table 5

Example of Phase I Data Analysis

	Male	Female	
Applicant	5	5	10
Non Applicant	15	18	35
	20	25	

Step 3 – Find degrees of freedom and the critical region.

Using the following formula *df* = (Rows-1)(Columns-1) the degrees of freedom were determined. For this example *df* = (2-1)(2-1) = 1 indicates there is 1 degree of freedom.

Step 4 – Find expected frequencies.

Finding the expected frequencies was a simple process, determining from Table 5 that out of 45 respondents, 20 or 44% were male and 25 or 56% were female. Based upon

the frequency distribution, if the null hypothesis was true, then both application status groups should have had the same proportion or males and females.

Step 5 – Enter data into STATA.

Once the populations were established, the number of sampled Applicant males, Applicant females, Nonapplicant males and Nonapplicant females were determined and entered into STATA for calculation.

Step 6 – Interpretation of results.

If the Fisher's exact test value was less than the Alpha Level, or $p < \boldsymbol{\alpha}$, then we rejected H_0. If Fisher's exact test value was greater than the Alpha Level, or $p > \boldsymbol{\alpha}$, then we failed to reject H_0.

Phase II quantitative data analysis.

Phase II data analysis was similar to that in Phase I. The data analyzed included the participant responses to the Noncognitive Questionnaire. Participant response scores for each of the eight Noncognitive variables were analyzed using the Fisher's exact score median test for dependent samples, which required the addition of a step to determine the median for each independent variable. Once participants were assigned Applicant or Nonapplicant status, Fisher's exact test was conducted to determine whether a relationship existed between the quasi-dependent variable and the independent variables. Phase II independent variables included: positive self-concept, realistic self-appraisal, successfully handling the system, preference for long-term goals, availability of strong support person, leadership experience, community involvement, and knowledge acquired in a field (Table 2). For this example, fictitious data identified as Positive Self-Concept.

Step 1 – Identify frequency of responses.

Once the populations were established, the number of sampled males, females, Applicants and Nonapplicants were identified and entered into the frequency distribution matrix as shown in Table 6.

Step 2 – Determine the median for responses to Positive Self-concept.

This step required that all scores be organized from the lowest number to the higher number. The median was determined by identifying the number of responses or *n* and dividing this number by 2.

Table 6

Example of Phase II Data Analysis

	Below Median	Above Median	
Applicant	5	5	10
Non Applicant	17	17	34
	22	22	

Step 3 – Establish hypotheses and a level of significance.

The null hypothesis or H_0: for college students participating in a first-year retention program, there was no relationship between positive self-concept and second-year retention program application status. The alternative hypothesis or H_A: for college students participating in a first-year retention program, there was a relationship between positive self-concepts and second-year retention program application status. All Alpha Levels or $\boldsymbol{\alpha}$ were equal to 0.1.

Step 4 – Find Degrees of Freedom and the Critical Region.

Using the following formula *df* = (Rows-1)(Columns-1) the degrees of freedom were determined. For this example *df* = (2-1)(2-1) = 1 indicated there was 1 degree of freedom.

Step 5 – Find expected frequencies.

Finding the expected frequencies was a simple process or determining from Table 6 that out of 44 respondents, 22 were below the median score for positive self-concept and 22 were Above the Median score for self-concept. Based upon the frequency distribution, if the null hypothesis was true, then both application status groups should have had the same proportion or males and females.

Step 6 – Enter data into STATA.

Once the populations were established and the median scores identified, the number of Applicants Below the Median score, Applicants Above the Median score, Nonapplicants Below the Median score and Nonapplicants Above the Median score were determined and entered into STATA for calculation.

Step 7 – Interpretation of results.

If the Fisher's exact test value was less than the Alpha Level, or $p < \boldsymbol{\alpha}$, then we rejected H_0. If Fisher's exact test value was greater than the Alpha Level, or $p > \boldsymbol{\alpha}$, then we failed to reject H_0.

Phase I qualitative data collection process.

The qualitative focus group interview script was based upon issues noted in the literature review that were of particular interest to second-year students and issues noted in the quantitative data analysis that required follow-up. A draft of the focus group

interview script (Appendix H) served as the basis for the focus group questions. The review of literature suggested focus group questions include the following topics: Positive Self-Concept or Confidence, Realistic Self-Appraisal, Understands and Deals with Racism, Prefers Long-range Goals, Availability of a Strong Support Person, Developing Student-Faculty Relationships, Personal and Emotional Support, Successful Leadership Experience, Demonstrated Community Service, Knowledge Acquired in a Field of Study, Major Selection, Career Direction, Sense of Belonging, Campus Involvement, Coping with Stress/Change, and Financial Issues.

Qualitative focus group interview participant selection.

The day after the participants were assigned to the Applicant or Nonapplicant group, a disproportionate stratified random sample was established. A disproportionate stratified random sample was conducted to ensure the sample was representative of the population (Hartas, 2010). This was important to the focus group interviews because it was possible that by using a simple random sample of students for the focus group interviews, the sample would not be representative of the population and could, therefore, render the results inaccurate.

To build the disproportionate stratified random sample, I created an Excel spreadsheet named Quantitative Research Pool List with the following data for the research population: Gen ID, Application Status, Gender, Ethnicity, First Gen Status, University Index Scores, and College Cumulative Grade Point Average. Students who responded to the Noncognitive Questionnaire were removed as potential focus group candidates. All remaining participants were sent an email (Appendix E) by the Clinical

Researcher on behalf of the researcher explaining the subject of the research, the participant compensation for focus group participation (each receiving a $25 gift card and available refreshments during the interview), confidentiality measures and safeguards, and how the participant could contact the researcher to confirm their participation in the focus group interview. Attached to the email was a simple form asking participants to inform the researcher when they were available to participate in the focus group interviews (Appendix F). The specific location and time for the interviews was to be determined. Email contact information for the researcher was provided in the email from the Clinical Researcher. Interested students were instructed to email the researcher with the dates and times they were available for focus group interviews. Focus Group participants were selected based upon interested participant availability. Interested participants were selected to as near as possible reflect the demographics of the research population.

It was projected that a 10% response rate from the 287 eligible members of the population would yield 28 focus group participants and would allow for participant selection based upon disproportionate stratified random sampling techniques to achieve a minimum of one focus group interview with Applicants and one with Nonapplicants. A response rate greater than 10% would have resulted in two focus group interviews with Applicants and Nonapplicants. In order in increase the number on interested participants, all participants were offered $25 Visa Gift Cards.

An email was sent from the researcher to the participants two days in advance of their focus group interview as a reminder of the date, time, and location of the focus group interviews.

Focus group interviews.

One focus group interview with eight participants was conducted with Nonapplicants. One focus group interview with five participants was conducted with Applicants. No focus group interviews were conducted with Applicants and Nonapplicants in the same interview.

Interviews were semiscripted with preestablished questions. The researcher used personal judgment during the interviews to rephrase questions or request that a participant expand upon an answer to allow for maximum depth while still discussing the established focus group questions.

Interviews were scheduled for 90 to 120 minutes. The Nonapplicant interview was approximately 105 minutes and the Applicant interview was approximately 90 minutes. The interviews were scheduled based upon respondent availability for April 8, 2013. Nonapplicant interviews began at 4:00 pm in Eddy Hall Room 101 followed by Applicant interviews at 6:oopm in the same room . Refreshments, pizza and bottled water, were provided during the interviews. All participants received a $25 gift card at the completion of their interview session.

The focus group interviews were digitally recorded and sent to a transcriptionist to produce a typed account of the interviews. Recordings were stored electronically (no

physical copy was available) in password protected files on the researcher's personal computer.

Phase III qualitative data analysis.

Qualitative data analysis was conducted through two processes. First, responses to the focus group interview questions of the Nonapplicants and Applicants were compared to identify any trends or differences between the populations. Next, open, axial, and selective coding was completed through a manual process. The open coding phase required a line-by-line examination of the transcribed focus group interviews text to identify commonalities in the responses of the research participants to create codes. Axial coding required the codes to be analyzed and those with commonalities grouped into categories. The selective coding phase entailed the discovery and communication of the phenomenon of each of the categories in a manner that illustrated the essence of responses given by research participants and, if present, the patterns of the phenomenon studied.

Phase III interpretation of qualitative data.

The quasi-dependent variable for Research Question 1, "what are the characteristics of students who apply to participate in a second-year retention program," was the participant's application status to the second-year retention program. The independent variables were: Gender, Ethnicity, First Gen Status, Pell Grant Eligibility, University Admission Index Score, High School Grade Point Average, High School Class Rank, College Cumulative Grade Point Average, Declared Major, and College Credits Earned.

The quasi-dependent variable for Research Question 2, "what student noncognitive variables reflect which students apply to participate in a second-year retention program," was the participant's application status to the second-year retention program. The independent variables were: Positive Self-concept, Realistic Self-appraisal, Successfully Handling the System, Preference for Long-term Goals, Availability of Strong Support Person, Leadership Experience, Community Involvement, and Knowledge Acquired in a Field.

The quasi-dependent variable for Research Question 3, "what factors do first-year students consider when determining whether or not they will participate in a second-year retention program," was the participant's application status to the second-year retention program. The independent variables were: Positive Self-concept or Confidence, realistic Self-Appraisal, Understands and Deals with Racism, Prefers Long-range Goals, Availability of a Strong Support Person, Developing Student-Faculty Relationships, Personal and Emotional Support, Successful Leadership Experience, Demonstrated Community Service, Knowledge Acquired in a Field of Study, Professional/Career Development, Major Selection, Social Integration/Sense of Belonging Student Involvement/Engagement, Coping with Stress/Change, and Financial Issues.

Research calendar.

March 1, 2013 – Researcher collected CSU biographical, precollegiate academic, and collegiate academic data from designated CSU contact.
March 1, 2013 – Phase II sample population established.
March 8, 2013 – Phase II sample population sent email with link to NCQ.
March 22, 2013 – Second-year Retention Program Application Deadline.
March 23, 2013 – NCQ surveys closed at 12:01am.
March 25, 2013 – Qualitative sample population established.

March 26, 2013 – Emailed invitations to Qualitative sample population.
April 8, 2013 – Focus Group Interviews conducted. Data collection complete.

Summary of Chapter IV

The purpose of this study was to examine *which* students are applying to second-year retention programs and *why* they are applying to them. The data was collected using a mixed methods explanatory research design. The design required two phases of quantitative data collection and focus group interviews of the research population. Sampling techniques were discussed and the NCQ survey introduced and determined to be reliable and valid.

I introduced literature and recounted and synthesized relevant studies. I explained the specific procedures for the methodology. Next, I will discuss the data findings.

Chapter V – Findings

Previous research expands researcher and practitioner knowledge of first-year retention in the areas of first-year noncognitive student retention variables, first-year student development, first-year SOC and First Gen student retention (Astin, 1993; Bean & Eaton, 2000; Sedlacek, 2004; Seidman, 2005; Tinto, 1993; Upcraft, Gardner, Barefoot & Associates, 2005). While it is clear from the existing second-year retention literature that there is some overlap between the factors that are important to the retention of first-year students and those important to the retention of second-year students, there are still gaps in existing knowledge, one of which is the understanding of the characteristics of successful second-year students (Schaller, 2000; Scobie, 2010).

A mixed methods research protocol was employed to examine student biographical data, academic performance, and noncognitive factors to gain a fuller understanding of which students apply to second-year retention programs at a major four-year research university and why they do so. This research expands knowledge and practitioner understanding of the characteristics and motivations of second-year students seeking to participate in second-year retention programs by answering three research questions:

1. What are the characteristics of students who apply to participate in a second-year retention program?

2. What student noncognitive variables reflect which students apply to participate in a second-year retention program?

3. What factors do first-year students consider when determining whether or not they will participate in a second-year retention program?

Organization of the Findings

The first step of the analysis of collected data began with a cross tabulation of the participants in the two quantitative phases of data collection in order to create contingency tables to establish a picture of the participants in Phase I (n = 337) and Phase II (n = 50). The second step was to implement Fisher's exact test of the Phase I and Phase II data collected through the use of STATA statistical analysis software. The third step was to analyze the focus group data. This was done in two stages. The first was to compare the focus group question responses of both Key Plus Applicants and Key Plus Nonapplicants to identify any overarching similarities and/or differences between the groups. Next, Key Plus Applicant responses were coded, regardless of the question, to identify any themes that arose. The same process of coding and theme identification was conducted on Key Plus Nonapplicants. The codes and themes were arranged to illustrate relationships and system maps were generated, one for Key Plus Applicants and one for Key Plus Nonapplicants. I will present the study's conclusions and recommendations in Chapter VI.

Cross Tabulation

Cross tabulation was conducted to summarize the categorical data of the research participants in the quantitative phases of data collection (Phase I and Phase II) in order to establish a picture of the research participants. The research population was composed of 337 participants; the difference between the N (337) and the Total Responses is based on

the number of complete fields. Since not all data fields were complete, the total number of responses does not always match N.

Phase I cross tabulation tables.

Using Table 7, Phase I Demographic Crosstabs, data indicated that of all first-year students participating in one of the four first-year Key Communities with useable data 34.8 % were Male and 65.2% were Female. The specific Key Community first-year students were participating in as first-year students were: 37.0% Key Academic, 27.3% Key Service,

Table 7

Phase I Demographic Crosstabs

Variable	Total Responses	Percentage of Response
Gender	330	
Male	115	34.8%
Female	215	65.2%
Key Community	330	
Academic	122	37.0%
Service	90	27.3%
Major Exploration	64	19.4%
Health Professions	55	16.7%
Ethnicity	318	
Asian-American	21	6.6%
African-American	47	14.8%
Native American/Pacific Islander	9	2.8%
Hispanic	81	25.5%
Caucasian	150	47.2%
Multiple Ethnicities	11	3.5%
First Generation Student Status	330	
Yes	74	22.5%
No	256	77.5%
Pell Grant Eligible	329	
Yes	195	59.3%
No	134	40.3%

19.4% Key Major Exploration, and 16.7% Key Health Professions. The student identified ethnicity of the research population was composed of 6.6% Asian-American, 14.8% African-American, 2.8% Native American/Pacific Islander, 25.5% Hispanic, 47.2% Caucasian, and 3.5% Multiple Ethnicities. First Gen students made up 22.5% of the research population with the remaining 77.5% identifying as not First Gen students. Finally, 59.3% of the research population were Pell Grant eligible and the other 40.3% were not eligible for Pell Grants.

Using Table 8, Phase I Academic Crosstabs, data indicated that of all first-year students participating in one of the four first-year Key Communities with useable data 6.1% had a University Admission score of 95 and Below, 21.6% scored 95-105, 34.7% scored between 106-115, 28.0% between 116-125, and the remaining 10% scored 126 or Above. During their high school careers no participants earned Grade Point Averages below 2.5 while 7.5% earned a GPA between 2.51 – 3.0, 35.9% earned between a 3.01 – 3.5, and 56.2% earned between a 3.51 – 4.0 high school grade point average. The High School class ranks of the participants were as follows: 0 participants were ranked below the 25th percentile of their class, 7.1% were ranked between 25.1 and the 50th percentile in their class, 34.7% research participants were ranked between 50.1 – 75th percentile in their class, and 58.2% percent of participants were ranked between 75.1 percentile and the top of their high school class. During their first semester of college 8.5% of participants earned Grade Point Averages below 2.0, 9.1% earned a GPA between 2.01-2.5, 24.9% earned between a 2.51 and a 3.0 GPA, 29.2% earned between a 3.01 – 3.5, and 28.6% earned between a 3.51 – 4.0 grade point average. Finally, 3.3% of students

Table 8

Phase I Academic Crosstabs

Variable	Total Responses	Percentage of Response
University Admission Index Score	329	
95 and Below	20	6.1%
95-105	71	21.6%
106-115	114	34.7%
116-125	92	28.0%
126 and Above	33	10.0%
High School Grade Point Average	329	
2.0 and Below	0	0.0%
2.01 – 2.5	0	0.0%
2.51 – 3.0	26	7.9%
3.01 – 3.5	118	35.9%
3.51 – 4.0	185	56.2%
High School Class Rank	268	
25% and Below	0	0.0%
25.1% - 50%	19	7.1%
50.1% - 75%	93	34.7%
75.1% - 100%	156	58.2%
College Grade Point Average	329	
2.0 and Below	28	8.5%
2.01 – 2.5	30	9.1%
2.51 – 3.0	82	24.9%
3.01 – 3.5	96	29.2%
3.51 – 4.0	94	28.6%
Semester 1 Credits Completed	329	
Less than 8	11	3.3%
9 – 11	21	6.4%
12 – 14	131	40.0%
15 – 17	156	47.4%
18 or More	11	3.3%

earned less than 8 credits during their first semester of college, 6.4% earned between 9 and 11 credits, 40.0% earned 12-14 credits, 47.4% earned 15-17 credits, and 3.3% earned 18 or more credits.

Phase II cross tabulation tables.

Based on Table 9, Phase II Demographic Crosstabs, data indicated that of the randomly sampled students who responded to the Noncognitive Questionnaire (NCQ), 24.0% were Male and 76.0% were Female. The responding Key Community participation was: 40.0% Key Academic, 28.0% Key Service, 22.0% Key Major Exploration, and 10.0% Key Health Professions. The participant identified ethnicity of the NCQ respondents is composed of 8.2% Asian-American, 10.2% African-American, 2.0% Native American/Pacific Islander, 31.0% Hispanic, 42.9% Caucasian, and 6.1% Multiple Ethnicities. First Gen students comprise 24.0% of the responding survey participants with the remaining 76.0% identifying as not First Gen students. Finally, 59.3% or the research population were Pell Grant eligible and the other 40.3% were not eligible for Pell Grants.

Using Table 10, Phase II Academic Crosstabs, data indicated that of the randomly sampled students who responded to the Noncognitive Questionnaire (NCQ) 0.0% had a University Admission score of 95 and Below, 14.7% scored 95-105, 32.0% scored between 106-115, 38.0% between 116-125, and the remaining 16% scored 126 or Above. During their high school careers no survey participants earned Grade Point Averages below 2.5 while 6.0% earned a GPA between 2.51 – 3.0, 24.0% earned between a 3.01 – 3.5, and 70.0% earned between a 3.51 – 4.0 high school grade point average. The High School class ranks of the NCQ participants were as follows: 0 participants were ranked below the 25^{th} percentile of their class, 9.1% were ranked between 25.1 and the 50^{th} percentile in their class, 20.5% research participants were ranked between 50.1 – 75^{th} percentile in their class, and 70.5% percent of participants were ranked between the

Table 9

Phase II Demographic Crosstabs

Variable	Total Responses	Percentage of Response
Gender	50	
Male	12	24.0%
Female	38	76.0%
Key Community	50	
Academic	20	40.0%
Service	14	28.0%
Major Exploration	11	22.0%
Health Professions	5	10.0%
Ethnicity	49	
Asian-American	4	8.2%
African-American	5	10.2%
Native American/Pacific Islander	1	2.0%
Hispanic	15	31.0%
Caucasian	21	42.9%
Multiple Ethnicities	3	6.1%
First Generation Student Status	50	
Yes	12	24.0%
No	38	76.0%
Pell Grant Eligible		
Yes	23	46.0%
No	27	54.0%

75th percentile and the top of their High School class. During their first semester of college 6.0% of survey participants earned Grade Point Averages below 2.0, 8.0% earned a GPA between 2.01-2.5, 22.0% earned between a 2.51 and a 3.0 GPA, 30.0% earned between a 3.01-3.5, and 34.0% earned between a 3.51-4.0 GPA. The majority of participants, 88.0%, completed between 12 and 17 credits hours during their first semester of college.

Using Table 11, Phase II Noncognitive Variable Crosstabs, data indicated that of the randomly sampled students who responded to the Noncognitive Questionnaire,

Table 10

Phase II Academic Crosstabs

Variable	Total Responses	Percentage of Response
University Admission Index Score	50	
95 and Below	0	0.0%
95-105	7	14.0%
106-115	16	32.0%
116-125	19	38.0%
126 and Above	8	16.0%
High School Grade Point Average	50	
2.0 and Below	0	0.0%
2.01 – 2.5	0	0.0%
2.51 – 3.0	3	6.0%
3.01 – 3.5	12	24.0%
3.51 – 4.0	35	70.0%
High School Class Rank	44	
25% and Below	0	0.0%
25.1% - 50%	4	9.1%
50.1% - 75%	9	20.5%
75.1% - 100%	31	70.5%
College Grade Point Average	50	
2.0 and Below	3	6.0%
2.01 – 2.5	4	8.0%
2.51 – 3.0	11	22.0%
3.01 – 3.5	15	30.0%
3.51 – 4.0	17	34.0%
Semester 1 Credits Completed	50	
Less than 8	2	4.0%
9 – 11	3	6.0%
12 – 14	16	32.0%
15 – 17	28	56.0%
18 or More	1	2.0%

(NCQ), 61.2% scored At or Below the Median score of 16 regarding Positive-self Concept or Confidence and 38.8% scored Above the Median. Regarding Realistic Self

Appraisal 22.4% scored At or Below the Median score of 8 while the remaining 77.6% scored Above the Median. Responses to NCQ questions related to the respondents Understanding and Dealing with Racism, 51.0% scored At or Below the Median of 12 and 49.0% scored Above the Median. Prefers Long-Range Goals to Short-term or Immediate Needs elicited 67.3% of responses At or Below the Median score of 7 and

Table 11

Phase II Noncognitive Variable Crosstabs

Variable	Total Responses	Percentage of Responses
Positive-self Concept or Confidence	49	
At or Below Median (16)	30	61.2%
Above Median (16)	19	38.8%
Realistic Self-appraisal	49	
At or Below Median (8)	11	22.4%
Above Median (8)	38	77.6%
Understands and Deals with Racism	49	
At or Below Median (12)	25	51.0%
Above Median (12)	24	49.0%
Prefers Long-Range Goals to Short-term or Immediate Needs	49	
At or Below Median (7)	33	67.3%
Above Median (7)	16	32.7%
Availability of Strong Support Person	49	
At or Below Median (8)	35	71.4%
Above Median (8)	14	28.6%
Successful Leadership Experience	49	
At or Below Median (6)	34	69.4%
Above Median (6)	15	30.4%
Demonstrated Community Services	49	
At or Below Median (6)	41	83.7%
Above Median (6)	8	16.3%
Knowledge Acquired in a Field	49	
At or Below Median (3)	28	57.1%
Above Median (3)	21	42.9%

32.7% Above the Median. Questions relating to the Availability of Strong Support Person generated 71.4% of respondent scores At or Below the Median score of 8 and 28.6% of scores Above the Median. Of the scores related to Successful Leadership Experience, 69.4% were At or Below the Median score of 6 and 30.4% Above the Median. Demonstrated Community Service responses found 83.7% At or Below the Median score of 6 and 16.3% Above the Median. Finally, 57.1% of respondents scored At or Below the Median score of 3 regarding NCQ survey questions related to Knowledge Acquired in a Field and 42.9% scored Above the Median.

Phase I Quantitative Data Analysis

The research population of 337 current Key first-year student community participants was investigated. In analyzing the following relationships, data that was not available or missing resulted in the fluctuation of the n-value.

Phase I – Application status and gender.

Table 12

Phase I - Application Status and Gender

	Male	Female	
Applicant	21	53	74
Nonapplicant	94	162	256
	115	215	330

n=330 $p = .213$ $\alpha = 0.1$

At an $\alpha = 0.1$, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between gender and second-year retention program application status. In the alternative hypothesis or H_A for college

students participating in a first-year retention program, there was a relationship between gender and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and conclude that there was not a statistically significant relationship between application status and gender (Table 12). It is notable that the p-value (.213) approached significance likely due to the higher percentage of female Key Plus Applicants (24.7%) than male Applicants (18.3%).

Phase I – Application status and first year retention program.

Table 13

Phase I – Application Status and First Year Retention Program

	Academic	Service	Major Exploration	Health Professions	
Applicant	42	7	11	14	74
Nonapplicant	80	82	53	41	256
	122	89	64	55	330

n=330 p= .000 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between first-year retention program participation and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between first-year retention program participation and second-year retention program application status.

Since p < α, we rejected the null hypothesis and concluded that there was a statistically significant relationship between application status and first-year retention program participation (Table 13). This significance was the result of the variation found in

the application percentages of the first-year retention programs: Academic (34.4%), Service (7.9%), Major Exploration (17.2%), and Health Professions (25.5%).

Phase I – Application status and race-ethnicity.

At an $\alpha = 0.1$, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between gender and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between gender and second-year retention program application status.

Table 14

Phase 1 – Application Status and Race and Ethnicity

	Asian-American	African-American	Native American/ Hawaiian/ Pacific Islander	Hispanic	Caucasian	Multiple Ethnicity	
Applicant	7	16	2	20	21	6	72
Nonapplicant	14	31	7	61	128	5	246
	21	47	9	81	149	11	318

n=318 p= .002 α=0.1

Since $p < \alpha$, we rejected the null hypothesis and concluded that there as a statistically significant relationship between application status and race-ethnicity (Table 14). This significance was the result of the variation found in the Applicant percentages of race / ethnic heritage: Asian-American (33.3%), African-American (34.0%), Native American/Hawaiian/Pacific Islander (22.2%), Hispanic (24.7%), Caucasian (14.1%), and Multiple Ethnicities (54.5%). Of particular note was the low percentage of Caucasian

Applicants and the high percentage of Applicants of multiple ethnic heritage in comparison to the application percentages of the other populations.

Phase I – Application status and first generation status.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between First Gen status and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between First Gen status and second-year retention program application status.

Table 15

Phase I – Application Status and First Generation Status

	First Gen	Not First Gen	
Applicant	37	37	74
Nonapplicant	107	149	256
	144	186	330

n=330 p= .232 α=0.1

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and First Gen status (Table 15). It is notable that the p-value (.232) approached significance likely due to the higher percentage of First Gen Applicants (25.7%) than Nonfirst Gen Applicants (19.9%).

Phase I – Application status and Pell Grant eligibility.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Pell Grant eligibility and second-year retention program application status. In the alternative hypothesis or H_A

for college students participating in a first-year retention program, there was a relationship between Pell Grant eligibility and second-year retention program application status.

Table 16

Phase I – Application Status and Pell Grant Eligibility

	Pell Eligible	Not Pell Eligible	
Applicant	35	38	73
Nonapplicant	160	96	256
	195	134	329

n=329 p= .031 α=0.1

Since p < α, we rejected the null hypothesis and concluded that there was a statistically significant relationship between Pell Grant eligibility and application status (Table 16). This result was likely due to the greater percentage of students not eligible for Pell Grants having applied for participation in Key Plus (28.4%) than students who were Pell Grant eligible (17.9%).

Phase I – Application status and university admission index score.

Table 17

Phase I – Application Status and University Admission Index Score

	Below 95	96-105	106-115	116-125	126 and above	
Applicant	4	17	26	15	12	74
Nonapplicant	16	53	88	77	21	255
	20	70	114	92	33	329

n=329 p= .215 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between university admission

index score and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between university admission index score and second-year retention program application status.

Since $p > \alpha$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and university admission index score (Table 17). It is notable that the p-value (.215) approached significance likely due to the variation in student application percentage based on University Admission Index Score: Below 95 (20.0%), 96-105 (24.3%), 106-115 (22.8%), 116-125 (16.3%), and 126 and above (36.4%).

Phase I – Application status and median university admission index score.

Table 18

Phase I – Application Status and Median University Admission Index Score

	At Or Below 112	Above 112	
Applicant	40	34	74
Nonapplicant	132	123	255
	172	157	329

n=329 M=112 p= .792 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median university admission index score and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention

program, there was a relationship between median university admission index score and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and median university admission index score (Table 18).

Phase I – Application status and high school grade point average.

Table 19

Phase I – Application Status and High School Grade Point Average

	Below 2.0	2.01-2.5	2.51–3.0	3.01 – 3.5	3.51 and above	
Applicant	0	0	6	24	44	74
Nonapplicant	0	0	20	94	141	255
	0	0	26	118	185	329

n=329 p= .771 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between high school grade point average and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between high school grade point average and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and high school grade point average (Table 19).

Phase I – Application status and median high school grade point average.

Table 20

Phase I – Application Status and Median High School Grade Point Average

	At Or Below 3.56	Above 3.56	
Applicant	35	39	74
Nonapplicant	135	120	255
	170	159	329

n=329 M= 3.56 p= .429 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median high school grade point average and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between median high school grade point average and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and median high school grade point average (Table 20).

Phase I – Application status and high school class rank.

Table 21

Phase I – Application Status and High School Class Rank

	Lower 25% of class	25.1% - 50%	50.1% - 75%	75% - Top of class	
Applicant	0	3	19	38	59
Nonapplicant	0	16	75	118	209
	0	19	93	156	268

n=268 p= .631 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between high school class rank and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between high school class rank and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and high school class rank (Table 21).

Phase I – Application status and median high school class rank.

Table 22

Phase I – Application Status and Median High School Class Rank

	At Or Below 80	Above 80	
Applicant	31	28	59
Nonapplicant	107	102	209
	138	130	268

n=268 M=80 p= .884 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median high school class rank and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between median high school class rank and second-year retention program application status.

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and median high school class rank (Table 22).

Phase I – Application status and college cumulative grade point average.

Table 23

Phase I – Application Status and College Cumulative Grade Point Average

	Below 2.0	2.01-2.5	2.51–3.0	3.01 – 3.5	3.51 and above	
Applicant	4	4	21	22	23	74
Nonapplicant	24	26	61	74	70	255
	28	30	82	96	93	329

n=329 p= .553 $\boldsymbol{\alpha}$=0.1

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between college cumulative grade point average and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between college cumulative grade point average and second-year retention program application status.

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and college cumulative grade point average (Table 23). Though not statistically significant, it was noteworthy that students with a 2.51-3.0 college cumulative grade point average (25.6%), 3.01-3.5 grade point average (22.9%), and 3.51 and above grade point average (24.7%) had higher Key Plus application rates than students with below 2.0 grade point average (14.2%) and 2.01 -

2.5 (13.3%) grade point average. When the categories were merged, application rates for students who had a cumulative grade point average of 2.5 or lower was 13.8% and application rates of students with a cumulative grade point average of 2.51 or higher was 24.4%.

Phase I – Application status and median college cumulative GPA.

Table 24

Phase I – Application Status and Median College Cumulative GPA

	At Or Below 3.13	Above 3.13	
Applicant	36	38	74
Nonapplicant	131	124	255
	167	162	329

n=329 M=3.13 p= .694 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median college cumulative grade point average and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between median college cumulative grade point average and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and median college cumulative grade point average (Table 24).

Phase I – Application status and credit hours completed semester 1.

At an $\alpha = 0.1$, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between number of credit hours completed during semester 1 and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between number of credit hours completed during semester 1 and second-year retention program application status.

Table 25

Phase I – Application status and Credit Hours Completed Semester I

	Fewer than 8	9-11	12-14	15-17	18 or more	
Applicant	2	2	28	41	1	74
Nonapplicant	9	19	103	114	10	255
	11	21	131	155	11	329

n=329 p= .374 α=0.1

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and number of credit hours completed during semester 1 (Table 25). Though not statistically significant, it was noteworthy that students completing 12-14 credit hours (21.4%) and 15-17 credit hours (27.2%) had higher Key Plus application rates than other students: fewer than 8 hours (18.2%), 9-11 hours (9.5%), and 18 or more (9.1%). When the categories were merged and application rates for participants who completed 12-14 hours and 15-17 hours were calculated and compared to those with fewer than 8 hours, 9-11 hours, and 18 or more hours, the application rates were more differentiated, 12-17 hours (24.1%) and other hours (11.6%).

Phase I – Application status and median credit hours complete semester 1.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median number of credit hours completed during semester 1 and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between median number of credit hours completed during semester 1 and second-year retention program application status.

Table 26

Phase I – Application Status and Median Credit Hours Completed Semester 1

	At Or Below 15	Above 15	
Applicant	58	16	74
Nonapplicant	183	72	255
	241	88	329

n=329 M=15 p= .298 α=0.1

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and median number of credit hours completed during semester 1 (Table 26).

Phase II Quantitative Data Analysis

Phase II – Application status and gender.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between gender and second-year retention program application status. In the alternative hypothesis or H_A for college

students participating in a first-year retention program, there was a relationship between gender and second-year retention program application status.

Table 27

Phase II – Application Status and Gender

	Male	Female	
Applicant	2	9	11
Nonapplicant	10	28	38
	12	37	49

n=49 p= .708 α=0.1

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and gender (Table 27).

Phase II– Application status and first year retention program.

Table 28

Phase II – Application Status and First Year Retention Program

	Academic	Service	Major Exploration	Health Professions	
Applicant	6	0	2	3	11
Nonapplicant	13	14	9	2	38
	19	14	11	5	49

n=49 p= .016 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between first-year retention program participation and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention

program, there was a relationship between first-year retention program participation and second-year retention program application status.

Since $p < \alpha$, we rejected the null hypothesis and concluded that there was a statistically significant relationship between application status and first-year retention program participation (Table 28). This significance was the result of the variation found in the application percentages of the first-year retention programs: Academic (31.6%), Service (0.0%), Major Exploration (18.9%), and Health Professions (60.0%). The trends found in the Phase II sample was consistent with the Phase I data.

Phase II – Application status and race-ethnicity.

Table 29

Phase II – Application Status and Race-Ethnicity

	Asian-American	African-American	Native American/ Hawaiian/ Pacific Islander	Hispanic	Caucasian	Multiple Ethnicity	
Applicant	0	2	0	5	2	2	11
Nonapplicant	4	2	1	10	19	1	37
	4	4	1	15	21	3	48

n=48 p= .068 α=0.1

At an $\alpha = 0.1$, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between race-ethnicity and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between race-ethnicity and second-year retention program application status.

Since $p < \alpha$, we rejected the null hypothesis and concluded that there was a statistically significant relationship between application status and race-ethnicity (Table 29). This significance was the result of the variation found in the application percentages of the students race / ethnic heritage: Asian-American (0.0%), African-American (50.0%), Native American/Hawaiian/Pacific Islander (0.0%), Hispanic (33.3%), Caucasian (9.5%), and Multiple Ethnicities (66.6%). Of particular note was the low percentage of Caucasian students and the high percentage of students with multiple ethnic heritage in comparison to the application percentages of the other populations. The trends found in the Phase II sample are consistent with the Phase I data

Phase II – Application status and first generation status.

Table 30

Phase II – Application Status and First Generation Status

	First Gen	Not First Gen	
Applicant	4	7	11
Nonapplicant	10	28	38
	14	35	49

n=49 p= .706 α=0.1

At an $\alpha = 0.1$, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between First Gen status and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between First Gen status and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and First Gen status (Table 30).

Phase II – Application status and Pell Grant eligibility.

Table 31

Phase II – Application Status and Pell Grant Eligibility

	Pell Eligible	Not Pell Eligible	
Applicant	6	6	12
Nonapplicant	17	21	38
	23	27	50

n=50 p= 1.00 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Pell Grant eligibility and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between Pell Grant eligibility and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and Pell Grant eligibility (Table 31). This result was unexpected considering that the Phase I results for this relationship with a larger sample size indicated there was a relationship between second-year retention program status and Pell Grant eligibility whereas the results here indicate there is no relationship between these factors. The smaller Phase II sample size (n = 50)

compared to the larger Phase I sample size (n = 329) required that Phase I data be given more weight and we concluded that there was a relationship between Application Status and Pell Grant Eligibility.

Phase II – Application status and university admission index score.

Table 32

Phase II – Application Status and University Admission Index Score

	Below 95	96-105	106-115	116-125	126 and above	
Applicant	0	2	4	2	3	11
Nonapplicant	0	5	11	17	5	38
	0	7	15	19	8	49

n=49 p= .360 $\boldsymbol{\alpha}$=0.1

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between university admission index score and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between university admission index score and second-year retention program application status.

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and university admission index score (Table 32).

Phase II – Application status and median university admission index score.

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median university

admission index score and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between median university admission index score and second-year retention program application status.

Table 33

Phase II – Application Status and Median University Admission Index Score

	At Or Below 117	Above 117	
Applicant	6	5	11
Nonapplicant	18	20	38
	24	25	49

n=49 M=117.5 p= .742 α=0.1

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and median university admission index score (Table 33).

Phase II – Application status and high school grade point average.

Table 34

Phase II – Application Status and High School Grade Point Average

	Below 2.0	2.01-2.5	2.51–3.0	3.01 – 3.5	3.51 and above	
Applicant	0	0	0	3	8	11
Nonapplicant	0	0	3	9	26	38
	0	0	3	12	34	49

n=49 p=1.000 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between high school grade

point average and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between high school grade point average and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and high school grade point average (Table 34).

Phase II – Application status and median high school grade point average.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median high school grade point average and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between median high school grade point average and second-year retention program application status.

Table 35

Phase II – Application Status and Median High School Grade Point Average

	At Or Below 16	Above 16	
Applicant	8	3	11
Nonapplicant	16	22	38
	24	25	49

n=49 M=3.67 p= .095 α=0.1

Since p < α, we rejected the null hypothesis and concluded that there was a statistically significant relationship between application status and median high school

grade point average (Table 35). This significance was the result of the variation found in the application percentages of the median high school grade point averages at or below 16 (33.3%) and those above 16 (12.0%). However, this finding in Phase II sample was not consistent with Phase I data. The smaller Phase II sample size (n = 49) compared to the larger Phase I sample size (n = 329) required that Phase I data be given more weight. We concluded that there was not a relationship between Application Status and Median High School Grade Point Average.

Phase II – Application status and high school class rank.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between high school class rank and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between high school class rank and second-year retention program application status.

Table 36

Phase II – Application Status and High School Class Rank

	Lower 25% of class	25.1% - 50%	50.1% - 75%	75% - Top of class	
Applicant	0	1	1	7	9
Nonapplicant	0	3	8	23	34
	0	4	9	30	43

n=43 p= .848 α=0.1

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and high school class rank (Table 36).

Phase II – Application status and median high school class rank.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median high school class rank and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between median high school class rank and second-year retention program application status.

Table 37

Phase II – Application Status and Median High School Class Rank

	At Or Below 83	Above 83	
Applicant	2	9	11
Nonapplicant	4	34	38
	6	43	49

n=49 M=83 p= .605 α=0.1

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and median high school class rank (Table 37).

Phase II – Application status and college cumulative grade point average.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between college cumulative

grade point average and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between college cumulative grade point average and second-year retention program application status.

Table 38

Phase II – Application Status and College Cumulative Grade Point Average

	Below 2.0	2.01-2.5	2.51–3.0	3.01 – 3.5	3.51 and above	
Applicant	1	0	4	2	4	11
Nonapplicant	2	4	7	13	12	38
	3	4	11	15	16	49

n=49 p= .513 =0.1

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and college cumulative grade point average (Table 38).

Phase II – Application status and median college cumulative GPA.

Table 39

Phase II – Application Status and Median College Cumulative GPA

	At Or Below 3.2	Above 3.2	
Applicant	6	5	11
Nonapplicant	19	19	38
	25	24	49

n=49 M=3.20 p=1.000 $\boldsymbol{\alpha}$=0.1

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median college

cumulative grade point average and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between median college cumulative grade point average and second-year retention program application status.

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and median college cumulative grade point average (Table 39).

Phase II – Application status and credit hours completed semester 1.

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between number of credit hours completed during semester 1 and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between number of credit hours completed during semester 1 and second-year retention program application status.

Table 40

Phase II – Application Status and Credit Hours Completed Semester 1

	Fewer than 8	9-11	12-14	15-17	18 or more	
Applicant	1	0	3	7	0	11
Nonapplicant	1	3	13	20	1	38
	2	3	16	27	1	49

n=49 p= .678 $\boldsymbol{\alpha}$=0.1

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and number of credit hours

completed during semester 1 (Table 40). Though not statistically significant, the trend noted in Phase I of students completing 12-14 credit hours and 15-17 credit hours having higher Key Plus application rates than other students with fewer than 8 hours, 9-11 hours, and 18 or more is present in Phase II data: 12-14 credit hours (18.8%) and 15-17 credit hours (25.9%), and fewer than 8 hours (50.0%), 9-11 hours (0.0%), and 18 or more (0.0%). When the categories were merged and application rates for students who had completed 12-14 hours and 15-17 hours were calculated and compared to those of fewer than 8 hours, 9-11 hours, and 18 or more hours, there appeared to be a trend, 12-17 hours (23.3%) and other hours (16.7%), consistent with Phase I data.

Phase II – Application status and median credit hour complete semester 1.

Table 41

Phase II – Application Status and Median Credit Hours Completed Semester I

	At Or Below 15	Above 15	
Applicant	7	4	11
Nonapplicant	25	13	38
	32	17	49

n=49 M=15 p=1.000 $\boldsymbol{\alpha}$=0.1

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between median number of credit hours completed during semester 1 and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between median number of credit hours completed during semester 1 and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and median number of credit hours completed during semester 1 (Table 41).

Phase II – Application status and positive self-concept or confidence.

Table 42

Phase II – Application Status and Positive Self-concept or Confidence

	At Or Below 16	Above 16	
Applicant	7	4	11
Nonapplicant	23	15	38
	30	19	49

n=49 M=16 p=1.000 α=0.1

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Positive Self-concept or Confidence and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between Positive Self-concept or Confidence and second-year retention program application status.

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and Positive Self-concept or Confidence (Table 42).

Phase II – Application status and realistic self-appraisal.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Realistic Self-

appraisal and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between Realistic Self-appraisal and second-year retention program application status.

Table 43

Phase II – Application Status and Realistic Self-appraisal

	At Or Below 8	Above 8	
Applicant	10	1	11
Nonapplicant	28	10	38
	38	11	49

n=49 M=8 p= .415 $\boldsymbol{\alpha}$=0.1

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and Realistic Self-appraisal (Table 43).

Phase II – Application status and understands and deals with racism.

Table 44

Phase II – Application Status and Understands and Deals with Racism

	At Or Below 12	Above 12	
Applicant	7	4	11
Nonapplicant	18	20	38
	25	24	49

n=49 M=12 p= .496 $\boldsymbol{\alpha}$=0.1

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Understands and Deals with Racism and second-year retention program application status. In the

alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between Understands and Deals with Racism and second-year retention program application status.

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and Understands and Deals with Racism (Table 44).

Phase II – Application status and preference for long-range goals.

Table 45

Phase II – Application Status and Preference for Long-range Goals

	At Or Below 7	Above 7	
Applicant	7	4	11
Nonapplicant	26	12	38
	33	16	49

n=49 M=7 p=1.000 $\boldsymbol{\alpha}$=0.1

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Prefers Long-range Goals to Short-term or Immediate Needs and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between Prefers Long-range Goals to Short-term or Immediate Needs and second-year retention program application status.

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and Prefers Long-range Goals (Table 45).

Phase II – Application status and availability of strong support person.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Availability of Strong Support Person and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between Availability of Strong Support Person and second-year retention program application status.

Table 46

Phase II – Application Status and Availability of Strong Support Person

	At Or Below 8	Above 8	
Applicant	10	1	11
Nonapplicant	25	13	38
	35	14	49

n=49 M=8 p= .143 α=0.1

Since p > α, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and Availability of Strong Support Person (Table 46). However, it is worth noting that this relationship was approaching significance as participants who scored at or below 8 on the Noncognitive Questionnaire applied for Key Plus at a higher percentage (28.6%) than those who scored above 8 (7.1%).

Phase II – Application status and successful leadership experience.

At an α = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Successful

Leadership Experience and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between Successful Leadership Experience and second-year retention program application status.

Table 47

Phase II – Application Status and Successful Leadership Experience

	At Or Below 6	Above 6	
Applicant	8	3	11
Nonapplicant	26	12	38
	34	15	49

n=49 M=6 p=1.000 $\boldsymbol{\alpha}$=0.1

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and Successful Leadership Experience (Table 47).

Phase II – Application status and demonstrated community service.

Table 48

Phase II – Application Status and Demonstrated Community Service

	At Or Below 6	Above 6	
Applicant	8	3	11
Nonapplicant	33	5	38
	41	8	49

n=49 M=6 p= .355 $\boldsymbol{\alpha}$=0.1

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Demonstrated Community Service and second-year retention program application status. In the

alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between Demonstrated Community Service and second-year retention program application status.

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and Demonstrated Community Service (Table 48).

Phase II – Application status and knowledge acquired in a field.

Table 49

Phase II – Application Status and Knowledge Acquired in a Field

	At Or Below 3	Above 3	
Applicant	7	4	11
Nonapplicant	21	17	38
	28	21	49

n=49 M=3 p= .737 $\boldsymbol{\alpha}$=0.1

At an $\boldsymbol{\alpha}$ = 0.1, I tested the null hypothesis or H_0 for college students participating in a first-year retention program; there was no relationship between Knowledge Acquired in a Field and second-year retention program application status. In the alternative hypothesis or H_A for college students participating in a first-year retention program, there was a relationship between Knowledge Acquired in a Field and second-year retention program application status.

Since p > $\boldsymbol{\alpha}$, we failed to reject the null hypothesis and concluded that there was not a statistically significant relationship between application status and Knowledge Acquired in a Field (Table 49).

Phase III Qualitative Data Analysis

Tables 50 and 51 are cross tabulation tables that offer a snapshot of the focus group participants, Key Plus Applicants and Key Plus Nonapplicants, and their basic characteristics: Pseudonym, First-year Key Community, Major, Gender, Race/Ethnicity, and First Gen Status.

Table 50

Phase III – Profiles of Applicant Focus Group Participants

Pseudonym	Key Community	Major	Gender	Race/Ethnicity	First Gen Status
Meg	Academic	Business	Female	Caucasian	Yes
Maria	Academic	Human Development and Family Studies	Female	Hispanic	Yes
Vicki	Academic	Biology	Female	African-American	Yes
Joy	Academic	Business	Female	African-American	No
Olivia	Explore	Undeclared	Female	Caucasian	Yes

The Key Plus Applicants focus group (Table 50) was less representative of the overall Key Plus Applicant population than anticipated due to the fact that these five students were the only Applicants to express interest in participating in the focus group of the 78 total Key Plus Applicants. The Applicants were all female students. They represented two Key Communities, four participated in the Key Academic Community and one in the Key Explore Community. There were two Business majors, one Human Development and Family Studies major, one Biology major and one student who has yet to declare a major. The racial/ethnic background of the focus group participants was

representative of the Applicant population with two Caucasian students, two African-American students, and one Hispanic student. Four of the five Applicant focus group interview participants were First Gen students, a higher First Gen student to Nonfirst Gen student ratio than in the Applicant population.

Table 51

Phase III – Profiles of Nonapplicant Focus Group Participants

Pseudonym	Key Community	Major	Gender	Race/Ethnicity	First Gen Status
Hillary	Service	Ecosystems and Sustainability	Female	African-American	Yes
Kojo	Service	Undeclared	Male	Hispanic	Yes
Amber	Service	Biology	Female	African-American	Yes
Lizzie	Service	Business	Female	Caucasian	No
John	Health Professions	Health and Exercise Science	Male	Caucasian	No
Beyonce	Explore	Human Development and Family Studies	Female	Asian-American	Yes
Jackie	Explore	Merchandising	Female	Asian-American	Yes
Rachel	Service	Health and Exercise Science	Female	Hispanic	No

The Key Plus Nonapplicants focus group (Table 51) was less representative of the overall Key Plus Nonapplicant population than anticipated due to a low interest to participate in the focus group interviews by male students. There were eight Nonapplicants who participated in the focus group interviews, six females and 2 males. They represented three of the Key Communities: five participated in the Key Service Community, two in the Key Explore Community, and one in the Key Health Professions

Community. There were two Health and Exercise Science majors, one Business major, one Ecosystems and Sustainability major, one Human Development and Family Studies major, one Biology major, one Merchandising major, and one student who has yet to declare a major. The racial/ethnic background of the focus group participants included two Caucasian students, two African-American students, two Asian-American students, and two Hispanic students. Five of the eight Nonapplicant focus group interview participants were First Gen students, representative of the First Gen student to Nonfirst Gen student ratio in the Nonapplicant population.

The focus group interviews were semi-scripted with 15 questions posed during an allotted 120 minutes in a classroom centrally located on the Colorado State University campus. The data analysis was conducted in two phases. First, a question by question comparison of Applicant and Nonapplicant responses was conducted to identify similarities and differences between their responses. This was followed by a Open/Axial/Selective coding process to identify codes and themes, without regard for the questions, of both Applicant interviews and Nonapplicant interviews.

Question-by-question comparison.

The purpose of the question by question comparison of Key Plus Applicant responses to Key Plus Nonapplicant responses was to identify similarities and differences between the focus group populations.

Knowledge acquirement.

Q: In what setting do you most effectively acquire knowledge?

Responses for both populations were similar in that the participants generally indicated a preference for experiential learning or a combination of lecture followed by reading as a means of acquiring knowledge. Respondents in both groups also discussed their study environment. Some indicated that studying in their rooms was preferable due to the comfort in their room. Others indicated that studying in their room was a distraction with friends, roommates, and televisions. Applicant Olivia stated, "I can be at home or [on campus] but outside is predominantly where I like to study . . . or anywhere where there is not a bed, because sleeping is a huge temptation for me not to study." Overall, responses between the populations were similar.

Role of racism.

Q: Tell me about the role racism or other strong forms of bias have played in your college experience.

Applicant and Nonapplicant responses to this question were similar in multiple aspects. First, Students of Color in both groups shared that they had past experiences with racism. Nonapplicant Amber talked about racism in terms of experiencing stereotypes.

> Most people stereotype African-Americans and Mexicans [as] not having a good education or not going to be successful in life, when you can just achieve that by not listening to all the comments being told. But just using those comments to help strive to reach a goal and achieve that.

Applicant Joy shared a college experience where she was called the "N word" and how she reacted to the scenario.

> I went to a party with my White friends and one guy called me the N word and it was really uncomfortable because more people started to join him, so we just had to leave because I was going to go crazy. But ever since

> then nothing bad has really happened. But I wouldn't say this is a form of racism, but when I came here it was a culture shock.

One Caucasian student indicated that she had not experienced racism first-hand until she arrived at Colorado State University. Applicant Olivia stated that,

> I came from a small town which was predominantly White. So, I didn't really know that racism still happened until I came here and I met my best friends who live across the hall who are two twin black boys and they really opened my eyes. And so for the first two months I had a really hard time – crying at times in terms of inequality in the world.

Her quote illustrates the feelings of a student who has not experienced racism in the past. However another Caucasian student, Applicant Meg, observed that she had grown up around diversity and was not as impacted by the diversity of students at Colorado State University.

> I would say I haven't been personally affected, but I've always been around a diverse group of people. We had a pretty diverse group compared to other high schools in Fort Collins . . . I think it's affected the way I view other people because since I was younger I learned how to view people in a different way and not be judgmental towards them because I personally don't like it when I see people like you, when Joy was victimized from the other people.

Nonapplicant Lizzie and Applicant Olivia discussed stereotypes based on sexual orientation. Olivia, who had not witnessed racial bias before had significant experience with another form of bias in the form of sexual orientation.

> I live 15 minutes from San Francisco, so homosexuality is not a big thing. I grew up and our teachers were, not all of them, but some of them were gay. And coming here and just talking to some people and they strongly are against homosexuality. It was weird because I never grew up with any one even questioning that being right or wrong.

Both groups discussed the education of those who generate tension based on bias. Applicant Hilary observed that she,

> felt the best thing you can do when you experience racism or bias is . . . educate them. I know there are student organizations here that put on stuff to educate the CSU student body about specific identity and the best thing you can do is just to educate them and prove them wrong.

It is noteworthy that the Applicant interview discussion eventually discussed stereotypes of First Gen students while the Nonapplicant interview did not broach this area of bias. Maria and Meg had similar statements about their experiences as First Gen students.

Applicant Meg shared,

> I'm a First Gen student and I've noticed a lot of differences. You just get thrown in and my parents didn't know how to – they didn't even know how to get into the dorm. And they [did not] know how you sign up for classes. And they didn't know how to sign up for scholarships or anything. I didn't know how to get a loan and they didn't either. So, it was just kind of – there's the people that know exactly what to do. I guess it's kind of an easier transition than it would be for a first generation student.

In short, both populations had similar experiences and viewpoint regarding diversity.

Short-term and long-term goals.

Q: Talk about your short-term and long-term goals. How do they relate to your day to day activities?

Goal related responses were grouped into two categories, short-term goals and long-term goals. The responses between Applicants and Nonapplicants regarding short term goals showed differences. The Nonapplicant responses were less specific and were

not all academically focused as compared to the Applicant responses. Applicant Kojo stated his short term goals were "just to do whatever I need to do to get to a [degree] and that includes school work, studying and just, that's it." Applicant John shared that his short term goals were to do "all the homework assignments and study for all the tests that might not even be important in the future." Applicant short-term responses tended to be more specific. Meg said her short term goal was to get through economics and microeconomics. Maria's short term goal was to increase her cumulative GPA to a 3.0.

There was a similar tendency with their long-term goals. Nonapplicant long-term goals included Jackie's desire to "just have a feeling of accomplishment. Not to please anyone else but to be able to please myself." Nonapplicants Beyonce, John, and Kojo all had similar hopes in that they wanted to live a comfortable life with a family. Applicant responses were more specific than Nonapplicants. Applicants Vicki and Meg stated their goal was to graduate in 3.5-4 years. Vicki and Olivia had specific post college plans to attend graduate school in their field of interest.

Strong support people.

Q: Do you feel like you have strong support people you can turn to in a crisis? What about when it isn't a crisis, you just have a question you can't answer?

Research participants in both populations indicated that they had a strong support network they could turn to in a crisis. Primary support seemed to be from family members and trusted friends for both Applicants and Nonapplicants. Nonapplicant Beyonce's comment illustrated the support the interviewees received from family and friends, "I have my family and know they are there for me all the time."

A follow-up question asking if there were faculty or staff members who were strong support mechanisms generated responses from both Applicants and Nonapplicants indicated that Key Community faculty and staff were important and considered to be supportive. However, Applicants identified Non Key Community faculty and staff members as strong support whereas the Nonapplicants indicated a belief that while Non Key Community faculty and staff members are supportive, there have either been negative encounters with non Key Community faculty and staff members or the Nonapplicants have been hesitant to make the approach to interact with them. Nonapplicant Jackie had bad experiences when approaching one professor and has been afraid to approach him ever since. “I reached out to my professor one time and it seemed like he didn’t care, so I was just turned off from reaching out from that point. I know that’s bad, the reason I won’t embrace him, but I was just scared ever since.”

Academic advisors seemed to be the staff members that Applicants and Nonapplicants could trust with school issues that may be considered developmental in nature. Applicant Beyonce’s comment is reflective of comments shared by Nonapplicant Jackie and Applicant Meg, “I would go to my advisor for more academic purposes and then my Key Mentor just for [the] simple life struggles.”

When Applicant and Nonapplicant comments regarding Key Community professional staff members and student staff members arose, they were often referred to as friends and role models. Applicants and Nonapplicants did not distinguish the Key Communities faculty or full-time professional from the student peer mentors and resident assistants as is reflected in Rachel’s comments:

> I would say if I could choose faculty it would be my key mentor (student staff) and my key facilitator (faculty). They both are awesome and would be completely willing to help me with anything whether it be academic or personal.

Community service.

Q: Do you perform service in an organization or community to which you belong? If so, what were they and what was your role?

This question also had consistent responses between Applicants and Nonapplicants. Both Applicants and Nonapplicants shared that they had committed to community service through Student organizations like: Alpha Phi Omega, Pre-physical Therapy Club, Africans United, El Centro, Asian Club, Student Leadership, Involvement, and Community Engagement (SLICE), Student Government, and local non-profit organizations. Most felt that they were not serving in leadership positions in the organizations, though some indicated that they were planning to apply for leadership positions in these organizations in their future.

Sense of belonging at college.

Q: Do you feel that you belong at college? Do you feel that you have the academic ability to graduate from college? Please explain.

These responses were consistent between focus groups. All students felt they belonged in college. Many talked about the expectation from their families that the student would go to college. Nonapplicant Beyonce stated, “college education has been a big part of my life since I was in elementary school . . . college has never been an option. It’s just always been [something] I knew I was going to do.”

Applicant Meg spoke about the support and expectations of her family and herself as a First Gen student:

> I feel like I deserve to be here. I worked pretty hard to get here and I just feel like everyone should be able to go to college. I also know I will graduate – I'll be the first one in my family to graduate, so it's kind of a big goal for me. And I have the support system from my family to get there.

Academic strengths and weaknesses.

Q: What are your academic strengths? What are your academic weaknesses? Do you have a plan to address them?

Responses to this question addressed two aspects of the students' academic development, study skills and comfort with academic subject areas and related skills. Students generally indicated that they were either strong in writing skills and liberal arts courses and weak in math and sciences or strong in math and sciences and weak in writing skills and liberal arts courses. More students indicated they were strong in writing skills and liberal arts and weak in math and sciences, but the responses were balanced between the focus groups.

Plans to address any perceived academic weaknesses often included available campus resources and improving study habits. Students in each population acknowledged that they knew of or had used The Writing Center, The Institute for Learning and Teaching (TILT), or class group study sessions. Students also had a variety of ideas and/or tools to improve their academic weaknesses such as: tutoring, group study sessions, study outside of their room (or study in locations with fewer distractions), etc.

There were no observable differences between these populations in their responses to this question.

Social connections.

Q: Do you feel like you are a part of a social circle on campus? Please explain.

The Applicants seem to prefer smaller social circles than the Nonapplicants. Whereas Nonapplicants responses indicated that they have at least one social circle and often more, Applicant responses indicate they had a limited or no social circle. Nonapplicant Rachel discussed her multiple social circles,

> I've been really blessed that there are a lot of different communities here. I definitely like everyone. The Key community has been so awesome. I met my best friend here through [Key]. I just like the diversity and how cool everyone is [in Key]. And the clubs I'm involved in also have been a way for me to build community and through my church I think I've been able to build community as well. Also the community service projects that we do through Key and SLICE is really cool. That has been how I have been able to form community.

Applicant's Maria and Meg gave a representative perspective on the Applicant social circles.

> I'm Meg and I wouldn't say I have a social circle either. I haven't really found a big group of people that I hang out with. I have a couple of friends, but they're all kind of spread out. I don't like huge groups of people. I don't know, I don't enjoy it. I'm more of a two or three people person.

Maria shared, "I came with my best friend here [from California] and then she left for Florida for an internship. I'm a very one friend person. I have friends that I meet, but I just have a one friend social circle." It is important to note that there was not a sense of dissatisfaction with any of the focus group participants related to their social circles.

Campus engagement.

Q: What kind of activities do you participate in while you are at school?

There were no distinctive differences in the responses between the populations. Applicants and Nonapplicants shared that they participate in a variety of activities on campus. These activities included: physical activities (working out at the university recreation center, rock wall climbing at the university recreation center, sand volleyball, road biking with friends, kickboxing classes, and Zumba classes), activities within various service and cultural student organizations (Alpha Phi Omega, CSUnity, African United, and Trifuno - El Centro) and professional student organizations (pre-physical therapy club, and business organizations).

There were two observations worth noting in the participant responses to the Campus Engagement theme. First, of the eight Nonapplicants in the interview, only five shared about their campus activities experiences. While this may be an anomaly, there were six to eight responses for all other questions. Second, between the two populations, the Applicants responses to their campus activities indicated a tendency to engage in fewer social activities and seek more individual activities. Applicants Vicki and Olivia shared that they sought occasional individual activities on campus whether walking on campus or sitting on the roof patio of a campus building with a great view, these activities allowed them to "clear their heads" and "unwind." Applicants also talked about engaging in internet surfing on websites including: Facebook, Twitter, Pinterest, and YouTube as planned activities.

Major selection.

Q: Talk about the process you used, or are using, to select your major.

The responses by Applicants and Nonapplicants were similar to each other. They generally indicated three issues. First, the students were all, to some degree, exploring their major through projects or through an evaluation of their classes fit with their goals and talents. Nonapplicant Amber shared,

> I recently did a four year plan as a project and it has actually made me realize that I do not want to be a biology major with all the assignments. So with that process I think I'm going to focus more on something I enjoy doing and am really interested in, like psychology because I do like psychology more than biology.

Applicant Meg had taken classes in her selected major, Business, and felt her major suited her to that point, "toward the end of high school I kind of decided that [business] is what I wanted to do and I declared [my major] before I got to college . . . and I love it so far".

Second, interview participants of both populations saw a connection between their major and their career path. Nonapplicant John said, "I don't exactly know what I want to do so I'm thinking I'm going to . . . choose to do something that I love to do, so I figured I like helping people and I'm interested in being healthy and nutrition." Applicant Vicki discussed the connection between major and her career. It is also noteworthy is that she had been exploring her major and her career since she was a junior in high school.

> I want to say in my junior year chemistry class, we had a little project where we had to choose what we wanted to do with our lives and we had to interview two people in that field. I interviewed my orthodontist and my dentist. And they were both biology majors and they told me all the classes I would have to take and everything that I would have to do. So, I kind of just knew since then I needed to be a bio major and what classes I needed to take.

Third, some of the major exploration was being conducted in seemingly haphazard ways or through a great deal of external influence and a minimum of personal connection. However, there was mental effort and physical energy being expended in the process of identifying a major. Nonapplicant Jackie shared,

> I just dive in an do it. I didn't really know much about theater and so I just declared it and it turns out it wasn't for me so I went back to being undeclared and I really like shopping and just being able to get paid to shop. I told my advisor about it and she told me to declare merchandising and so that's what I'm doing right now. I just jump in. I don't even test it. I just go for it.

Applicant Olivia shared,

> I'm trying to choose my major. Pretty much by me thinking and then just calling my mom and then she says, 'no, that's not for you'. So that's how I will be choosing my major. And since she is paying for school, she pretty much has the final say.

Professional direction.

Q: Generally speaking, do you feel like you know what your professional direction is? Please explain.

Responses to the questions related to career path selection were similar to those of major exploration and selection. There appeared to be a link between these processes. The majority of responses indicated that investigation was taking place but that the students were in various stages of the career selection process. Overall, Applicants seemed to have a clearer idea of what they wanted their career to be. Applicants Vicki and Meg identified specific career paths, Orthodontics and Business marketing respectively, based upon personal and academic exploration. Meg said,

> I thought about being a marketing manager. I'd like to work for a big company, I know that for sure. I don't ever want to own my own business, too much work, don't make enough money, so I might as well be working somewhere else..

Applicant Olivia had considered various career paths, but her mother determined that those explored did not suit her. "I'm Olivia and no I haven't identified a career path. I wanted to be a teacher, but my mom said no. I wanted to be a flight nurse and she said maybe, so she pretty much delegates my life."

The Nonapplicant pool had two research participants who identified the Peace Corp and missionary work as initial career goals following college. These responses were not unusual considering they were members of the Key Service community and may have had a greater likelihood of seeking a service oriented non-profit occupational career path.

Nonapplicant Kojo's response echoed the responses of other Nonapplicants Lizzie, John, and Amber, in that there was not a specific career path, but a general idea of what their careers might look like. As an example, Kojo noted, "Oh, I want to be a social worker because I want to work with people [either] as a social worker or a teacher".

Faculty / staff mentorship.

Q: Do you have anyone you consider a mentor at the university? Please explain.

The responses to this question were consistent between the populations. Both Applicants and Nonapplicants talked about mentors among their family, friends, and Key academic staff members. It is interesting to note that some of the mentors were identified as university faculty and staff members with whom they did not have a relationship. Applicant Olivia shared that her mentor was a public speaker she had heard once and with whom she has had no further contact. Though not a traditional mentor-mentee

relationship, it seemed that she was seeking a role model and the public speaker's message resonated with her. While Olivia's example is an extreme case, other Applicant and Nonapplicant responses indicated that each of the focus group participants had faculty and staff members they identified as mentors. The amount of personal interaction with their mentors varied from simple observation to active, regular interaction and discussions with their mentor.

Financing cost of college.

Q: How have finances affected your ability to stay enrolled at college? Please explain.

The Applicants and Nonapplicants had a balance of students whose families were financing all or most of their college expenses and others who were financing the college experience on their own through scholarships, grants, and student loans. Applicant Maria talked about the impact her financial situation creates for her,

> [My financial situation] has affected me in a way because next year I won't have as many scholarships as I did this year. So, if I don't have enough money, I will probably have to transfer out. That's not something I'd like to do. Also, fun wise, I don't have money to join a sorority, but you have to spend money for the one I wanted to join, so I feel like I'm cheated out of my experience, but you have to just make the best out of it.

Nonapplicant Amber discussed her reluctance to take out student loans. However, when the choice was to either attend CSU and take student loans or choose to not take student loans and not enroll at CSU, she chose to take the loans:

> When it comes to finance, at the beginning of the year I didn't really have a lot of money to pay for college so if I changed my mind I didn't take out many loans so if I didn't want to go to school here anymore it wouldn't hurt much, but I decided, as bad as I didn't want to, I decided to take loans

> out and I had to pay some of the money out of my pocket even though I really didn't have it. But this year I should be receiving some more financial aid because I think I'll be staying here.

There was one Nonapplicant, Kojo, who offered a confusing description as to how he was financing college:

> I'm here with no grants and no scholarships and no financial aid. So I'm here all alone and my parents are pretty much they…I have my own loans and they have their loans but I'm going to get a job. I started saving up my loans from my refund checks. I mean so that's…I have to deal with that though.

Summary of question-by-question comparison findings.

There were three differences between the responses of Applicants and Nonapplicants that arose in the question by question analysis. First, the responses of the Applicants were more specific than those of Nonapplicants regarding Short-term and Long-term goals. Second, Applicants appeared to belong to smaller social circles than Nonapplicants. The Applicants responses did not seem to indicate this was a negative issue, rather they seemed to prefer more time alone than the Nonapplicants. Third, while both populations indicated that they were engaged in the campus community, the Applicants sought more individual activities than Nonapplicants. These differences were also present in the Open/Axial/Selective Coding Results.

Open/axial/selective coding findings.

Patterns emerged through the process of open, axial, selective data analysis, suggesting that relationships existed in the coded responses of each population. It was apparent that a map of these relationships would be a useful means to exhibit the similarities and differences found between Applicants and Nonapplicants to Key Plus. I

will explain the broader themes and the coded responses for each population, Applicants and Nonapplicants, as well as the relationships that offered insight as to the similarities and differences between the populations.

Table 52

Focus Group Response Themes by Population

Themes	Applicants	Nonapplicants
Finances	✓	✓
Family Support	✓	✓
I Belong in College / I Will Graduate	✓	✓
Faculty / Staff Interaction		✓
Faculty / Staff Support	✓	
Diversity	✓	✓
Social Connections	✓	✓
Campus Involvement	✓	✓
Major/Career Path	✓	✓
Goal Setting	✓	✓
Knowledge Acquirement & Academics	✓	✓

Nonapplicant.

Support to belonging on campus.

Figure 7 visually maps the codes, themes, and relationships identified when analyzing the focus group responses of the Nonapplicants. The theme, Support to Belonging, is composed of three codes: Finances, Support (Family) and Sense of Belonging/I Will Graduate.

Finances.

The Nonapplicant responses indicated that finances, while a concern for some, were not an issue that would prevent the respondents from continuing their education. Five of the eight respondents stated that their parents were covering all or the majority of

Figure 7

Phase III System Map – Nonapplicants

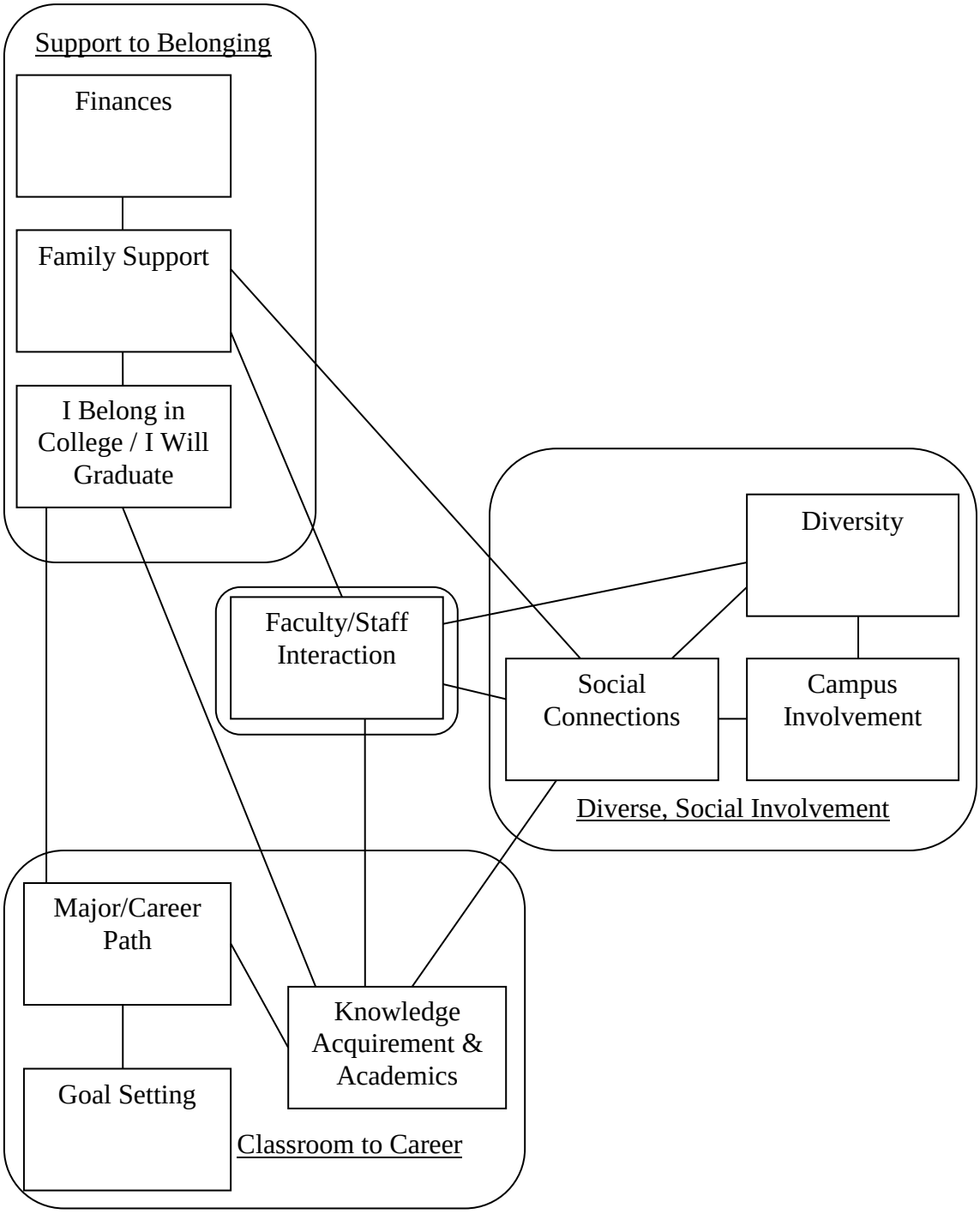
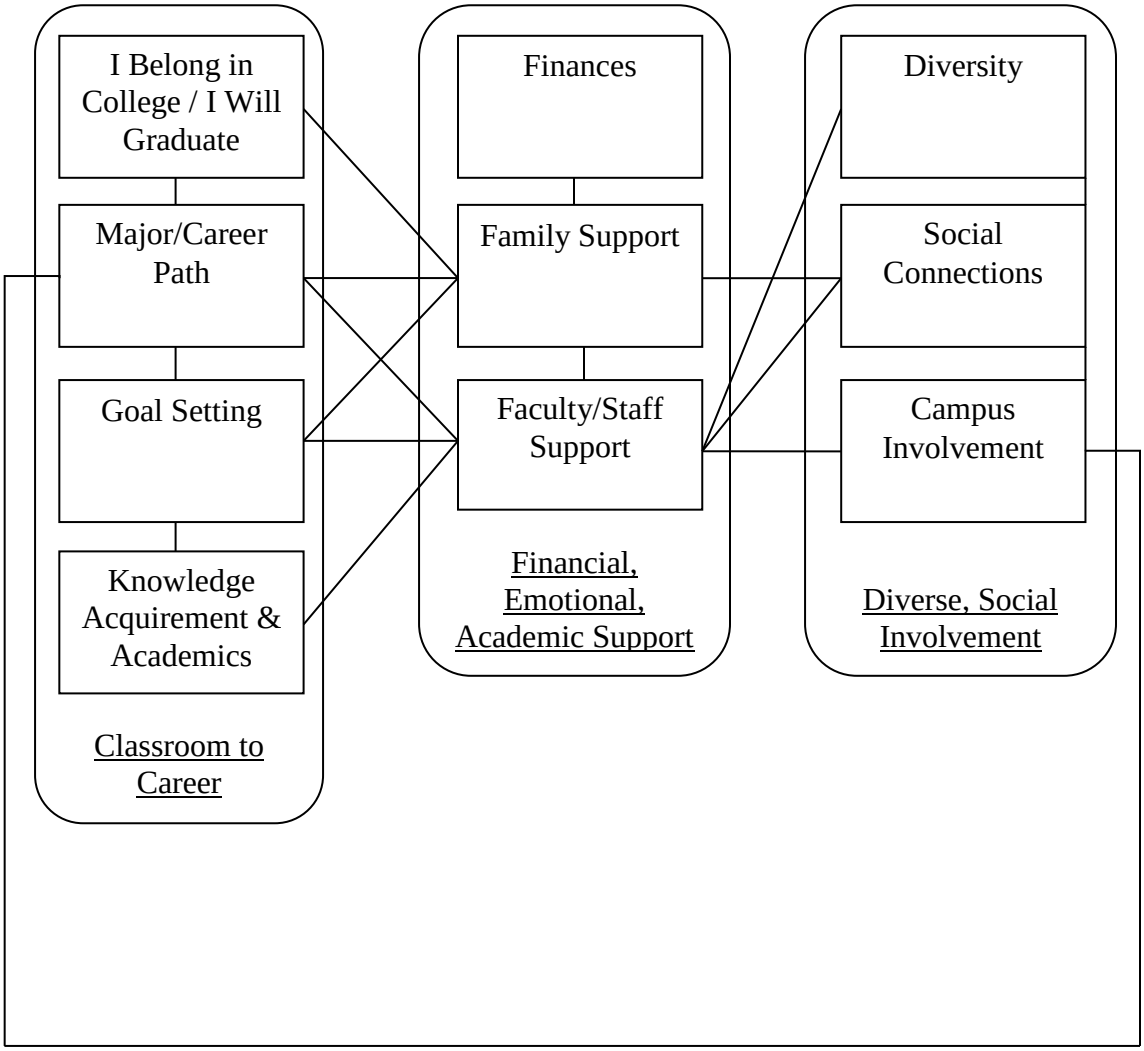


Figure 8

Phase III System Map – Applicants



their educational expenses. Of these five, three had some form of employment that allowed them to contribute to the cost of their education. John stated that he had two summer jobs and saved the majority of his earnings to pay for, “books and personal expenses . . . and possibly a study abroad trip.” Jackie had a job during the school year

that allowed her to "feel good about spending . . . and [not] relying on parents for money because they are already doing enough for me." Rachel's motivation in having a job was similar to Jackie's, however Rachel viewed her scholarships as a contribution to her educational expenses that eased the burden on her family.

Kojo, Amber, and Hillary found their financial situation to be more impactful on their college experience than the rest of the Nonapplicants. All three found that they were required to be mindful of their finances. For Kojo, that meant taking out the maximum number of loans available. He had begun looking for a campus job that would help him earn money for the remainder of the Spring 2013 semester. He concluded this thought with the statement, "I have to deal with that," indicating that he was taking responsibility for the financing of his college education. Hillary found a campus job for the Spring 2013 semester. She commented, "my parents used to send me money during the fall, but now that I have a job, they don't send me money anymore. I actually have to balance my money or else I will go broke." Amber acknowledged that the concern that she might not want to stay in college impacted her initial willingness to take out student loans:

> [A]t the beginning of the year I didn't really have a lot of money to pay for college so maybe . . . if I didn't want to go to go here anymore it wouldn't be a big deal . . . but, as bad as I didn't want to, I decided to take loans out.

Financially, the responses indicated that the majority of students had the financial support of their parents and the willingness to find the means to allow them to continue their college education.

Family support.

Nonapplicant responses indicated that they viewed their family as an integral part of their support system. Their responses were fairly similar in that members of their family expected their children to go to college, were resources for various problems that might arise while they were at college, and that there was pressure on the respondents to do well in college. The following comment from Jackie was indicative of the responses from the other participants. “I’m really fortunate that my parents are supporting me emotionally and financially . . . it would make me feel really selfish about talking about dropping out and giving up on their trust and support in me.” It is this family support that influenced their attitudes regarding their belonging in college and their confidence that they would graduate.

Sense of belonging / I will graduate.

Nonapplicant responses indicated that family support provided confidence and expectations for success that led students to respond that they felt a sense of belonging in college. While Amber indicated that she had considered the possibility that she might not continue her education at Colorado State University, she was clear in that she belonged in college and would graduate.

Existing research has indicated that First Gen students often feel like imposters on college campuses and that they do not belong (Davis, 2010). Five of the eight Nonapplicants were First Gen students and would have been more likely to state that they didn’t feel like they belonged on campus. However all indicated that they did have a sense of belonging. All of the First Gen students and one of the Nonfirst Gen students

referenced that the academic support services available to them, whether used or not, helped them to feel that they belonged on campus.

Nonapplicants primarily received emotional and financial support from family members. Nonapplicants differed from Applicants in that Nonapplicants did not identify faculty and staff as support mechanisms for their college success whereas Applicants seemed to have made more faculty and staff connections and spoke of them as support systems. This concept will be elaborated upon in the Applicant system map under Faculty/Staff support.

Classroom to career.

The theme, Classroom to Career, is composed of three codes: Goal Setting, Knowledge Acquirement and Academics, and Major/Career Path. According to Sedlacek (2004), goal setting that is predictive of likelihood to persist to graduation is comprised of two factors. Goals are related to academic achievement and are specific. Schaller identified the late freshmen year as the time some, but not all, college students begin to identify their majors and career paths. Nonapplicant participant responses within this theme each related to these items.

Goal setting.

The responses related to goal setting are evenly split between specific, academically related goals and ambiguous, nonacademically related goals. Specific academically related goals included Beyonce's, "go to all classes and do all assignments" to longer term goals such as Rachel's "get through the semester, graduate, go to graduate school for Physical Therapy." This contrasts to the nonspecific responses, like Kojo's

response to short term goals, “to do whatever I need to do, school work and studying,” and long term goals like John’s “get a well-paying job and start a family.” The responses are not inconsistent with students in their second-semester of college.

Knowledge acquirement and academics.

Responses coded to Knowledge Acquirement and Academics included student discussion of their academic strengths and weaknesses. The responses ranged from specific classes, like Biology, general academic skills, like math or writing, to various knowledge acquirement skills, like time management, procrastination, and study habits. There were no identifiable trends in their responses.

Major/career path.

The students were in different stages of identifying their majors and career paths. Rachel stated that she has identified Exercise and Sports Science as her major and physical therapy as her career path. She has taken various science courses required for Exercise and Sports Sciences students and has found them to be enjoyable. Lizzie stated that she “was interested in a few different things but decided that I don’t want law school because it is too much school”, but she thinks maybe business is the right direction and has plans to take classes in the business school next year. Kojo is exploring multiple majors in Sociology, Graphic Design, and Human Development and Family studies and trying to connect these options to his ultimate career path.

Diverse, social involvement.

The theme, Diverse, Social Involvement, is composed of three codes: Social Connections, Diversity, and Student Involvement. The Nonapplicant's responses indicated that these codes were interconnected.

Social connections.

Respondent statements indicated that most Nonapplicants had developed multiple social circles. The connections were developed through many avenues. Some of the social connections were the result of interactions with other Key participants in the residence halls and in Key programs, especially through classes and community services programs. Other connections were developed through common interests in student organizations. While student professional organizations were mentioned multiple times, the most commonly cited types of organizations students cited as an important to their social connections were service organizations and cultural organizations.

The other most commonly discussed issue was the interest by all students in furthering their understanding or the understanding of others regarding diversity issues.

Student involvement.

Four of the eight focus group participants were members of the Key Service first-year community; this likely contributed to the large number of service oriented social connections, but not of the cultural organization related responses that were offered by Key Service members. Social connections based in cultural student organizations were cited by six of the eight Nonapplicant focus group participants, all of whom identified themselves as Students of Color. Cultural organizations most often cited were Africans United, a group whose focus is on African cultural traditions, and El Centro, a University

support center for students of Hispanic heritage. Responses indicated that the opportunity to engage with other students who shared experiences based on their heritage gave them a "peer support group", and opportunity to, "show pride in my heritage by teaching others".

These student involvement opportunities served as their social connections outside of Key, often with connections to other students in Key they would not have met otherwise. The responses of Nonapplicants regarding student involvement were similar to those of Applicants with one exception. The Applicants participated in a similar number of organizations, but they did not view these organizations as social circles as Nonapplicants did.

Diversity.

The line between student involvement and diversity is blurry, but the distinction was made to account for the participants interest in learning about diverse issues outside their student involvement opportunities. Amber, an African-American Nonapplicant talked about the challenges she faces with the stereotypes society places on minorities, "not having a good education or not being successful in life." She identified Key as being a support mechanism for helping her to, "achieve and not listen to the comments . . . to strive to reach and achieve the goal of finishing college."

Jon, a Caucasian student, commented that his high school was not as diverse as the Key communities were. He was hesitant in joining Key as an incoming freshman, but stated that, "Key forced me to meet people of all different diversities and backgrounds." Rachel, a Hispanic Nonapplicant, discovered, "you may not necessarily have the same beliefs with or be the same as [other students], but finding similarities and finding that

you can get along has been very cool." Her sentiments were echoed by several of her peers in the focus group interview.

The theme, Diverse, Social Involvement was identified for the connections student identified between the development of their social connections, student involvement choices, and their interest in issues related to diversity.

Faculty/staff interaction.

This code was identified as its own theme for Nonapplicants based on the responses from Nonapplicants indicating that they had not developed many faculty and staff interactions outside those they had with Key professionals and student staff. This differed from the responses of Applicants who identified more relationships with faculty and staff members outside the Key Community.

Nonapplicants universally acknowledged Key staff members as strong support members and resources as they navigated the college experience. Only Hillary and Amber identified having developed connections with faculty and staff members outside of the Key community. Hillary worked in an academic department and acknowledged, "at first I was intimidated by the professors because they were like so smart and you don't want to talk to them because you don't want to seem dumb." This comment was affirmed by multiple members of the focus group, but Hillary continued, "working with them [I found] that they are really nice . . . and are willing to help me." Hillary met one professor who was born in the same country and who, "knows what my life is like and how I socialize . . . she understands me." Amber sought assistance from the TRiO funded Academic Advancement Center to help her find and write scholarship applications. Her

contact became her mentor. “[My mentor] has been my reference to get scholarships, . . . internships, and is always on my back when it comes to school work.”

Hillary and Amber were the only two of the eight Nonapplicants who identified faculty or staff connections outside of the Key Communities. Kojo stated that he had no faculty and staff mentors, but that he liked his Key Peer mentor. The other five had built multiple Key staff relationships that they identified as meaningful. It is interesting that these students, who have the majority of their strong support found within the Key framework, decided to not apply for continued support through Key Plus. The reasons may be found in the strong support they identify through their families. However, the support they identified through their families was not found to be more meaningful than the support offered by Applicants’ families.

Nonapplicant theme relationships.

The responses of the Nonapplicants indicated that the participants had, generally speaking, strong Support to Belonging on Campus characteristics that were enhanced by their development of Diverse, Social Involvement connections, and personal direction in the Classroom to Career theme. These three themes had strong connections to Faculty and Staff Interaction through the Key Communities, but they chose to forego the Key support during their second-year, for the most part, without having developed these connections outside the Key community. While Key staff offered their assistance when they were able, once Key students moved on to their second-year, Key staff was unable to offer consistent, meaningful support to these students. Essentially, the Nonapplicants chose to move on to their second year without the faculty and staff support that they

acknowledged in their focus group responses was important to their success during their first year.

Applicant.

Figure 8 visually represents the codes, themes, and relationships identified when the focus group responses of the Applicants were analyzed.

Financial, emotional, and academic support.

The theme, Financial, Emotional, and Academic Support, is composed of three codes: Finances, Family Support and Faculty and Staff Support.

Finances.

The Applicants' responses indicated that finances, while a concern for some, were not an issue that would prevent them from continuing their education. One of the five respondents stated that her parents were covering all of her educational expenses. Meg, a First Gen Applicant, shared that while her father earned a lot of money, he was the sole provider for her family and that he could not financially support her college education. His income prevented her from qualifying for financial aid. "The wealth gap . . . kind of screws me over in the long run. My parents make a lot of money, but they are not going to be able to help me get all the way through college." She went on to state that, while frustrated, she was prepared to, "do whatever it takes to pay for college until she graduates."

Joy and Vicki shared similar circumstances in that they were prepared to take out the loans that would allow them to graduate. Both sought to maintain their grades to keep

existing scholarships and sought more scholarships for the following year to contribute to their college financing.

Maria felt like it was likely that she would eventually have to transfer to a college closer to home for financial reasons. “That’s not something I’d like to do. [My financial situation] also prevents me from joining a sorority . . . it makes me feel kind of cheated out of some of my college experiences.”

Meg took a job to help pay for college. This job was in a small local business where she felt like she was getting on the job experience in line with her major and career path in marketing. None of the other students indicated that they had or were seeking some form of employment to earn money. This was different than the Nonapplicants where the majority of students either had jobs or recognized that they needed a job to help support themselves through college.

Despite Maria’s likelihood of transferring, all the students felt like finances would not be a factor in completing their college education. It is important to note that should Maria transfer, she would be considered a persistence casualty and would count against Colorado State University as a persistence casualty though she may complete her degree at another institution.

Family support.

Applicant responses consistently indicated that they viewed family as supportive of their college experience. Family members expected their children to go to college and to succeed in college. The difference between Applicants and Nonapplicants was that

First Gen students felt their parents were unable to offer practical support regarding the process of college.

Vicki and Joy were unique in that their parents were strong support systems for them; they also had older siblings or cousins on campus that served as a support systems socially, emotionally, and academically.

Both Meg and Maria observed, that while other students talked about their parents helping them select classes or apply for financial aid, they did not have that from their parents. It was not that their parents were not emotionally supportive of their college efforts, Meg and Maria were clear on this point, but since they did not go college, "they don't understand how it works."

Faculty and staff support.

All Applicants identified Key Community professional and student staff as providing supportive mentorship in their college experience. This finding was similar to the findings of Nonapplicants. What was distinctive when comparing Applicants and Nonapplicants was the faculty and staff interaction outside the Key Community. Joy, Maria, and Vicki stated that it was hard to build relationships with faculty and staff members outside of Key, "but I know you're supposed to go in there and talk with them." However, despite the perceived difficulty in interacting with faculty and staff members, all three identified faculty and staff members outside of Key who served as a person they could talk to regarding their college experience.

Meg and Olivia made connections with faculty and staff but they did not share Joy, Maria, and Vicki's attitude regarding faculty connections being difficult. Meg

identified two professors that she talked with and felt that they were supportive of her needs. “I don’t go to them with every little problem, but they’re pretty open about sharing advice or helping me.” Olivia felt like she had, “a couple professor friends I can talk to,” but she did not want to bother them with her problems. However, she stated that she was comfortable going to them when the situation was appropriate.

Though the Applicants saw limits to their interactions with faculty and staff outside the Key Community, they seem to be more engaged in communication with non Key faculty and staff than Nonapplicants. This may have been the result of gaps in the parental support identified by Applicants regarding navigating the college experience. Nonapplicants did not identify such gaps and had fewer Non Key faculty and staff interactions.

Classroom to career.

The theme, Classroom to Career, was composed of four codes: Goal Setting, Knowledge Acquirement and Academics, Major/Career Path, and Sense of Belonging/I Will Graduate. As previously noted, goal setting that is predictive of likelihood to persist to graduation is comprised of two factors. Goals are related to academic achievement and are specific. Schaller identified the late freshmen year as the time some, but not all, college students begin to identify their majors and career paths. Sense of Belonging/I Will Graduate had been placed in this theme for Applicants as the effort they had made to that point to identify their majors and career paths seemed to have developed their Sense of Belonging in College, whereas for Nonapplicants, the Sense of Belonging they identified seemed to be generated in the support of their families.

Goal setting.

The responses related to goal setting were more specific and academically related than the Nonapplicants were. All Applicants had specific, academically related goals. Short-term goals like Meg's, "get through Economics and Business Calculus," and long-term goals such as Vicki's, "I'm focused on studying and making sure I get good grades because I know it will be tough to get into dental school," encompassed both relationships to academics and specificity of goal setting. Overall, the Applicants had more specific long-term goals with the exception of Olivia, who hoped to, "get a lot out of class, become an activist, and hopefully be wealthy." These responses illustrated that, overall, the Applicants put more thought into their goals, and as will follow, their Major and Career paths.

It was noteworthy that three of the five respondents identified that graduating in four years or less was a goal that they had set for themselves. This goal may have been established to minimize the time that was spent at college in order to keep the costs of college down.

Major/career path.

Four of the five respondents identified what they believed would be the career path that best suited their abilities and the major that would allow them to pursue their chosen career. Applicant Olivia was still searching for her major. She described a process that seemed to place much of the decision making power for her career and major selection out of her hands. "I'm trying to choose my major. Pretty much by me thinking about what interests me and then just calling my mom. So that's how I will be choosing

my major. And since she is paying for school, she pretty much has the final say." While she was in the early stages of major selection, she was the anomaly in the Applicant focus group.

Joy had taken personality tests, sought counsel from her family and had identified that she would like to work in business and merchandising. Maria stated that she always wanted to work with children and declared her major in Human Development and Family Studies. She was still exploring whether she wanted to do social work or classroom teaching, but was confident that her career would include children. Meg had been thinking about her career since she was a junior in high school. She declared a Business major and had many business oriented people in her family. She worked summer jobs and held a job that allowed her to gain more experience in business to identify exactly what career path in Business she would pursue. She spoke enthusiastically about her business classes and felt like she had made the right choice.

Vicki knew she wanted to be an orthodontist since she was 12 years old. When she was a junior in high school, she interviewed a dentist and an orthodontist as part of a class project and discovered that both had been biology majors. Since then she focused her energy into preparing herself to graduate from college with a biology degree.

While each took different paths in identifying their major and career path, each devoted mental effort and physical energy into identifying these paths. A comparison to Nonapplicants led me to conclude that the Applicants in this study had made more progress in identifying their major and career paths than Nonapplicants.

Knowledge acquirement and academics.

Responses coded to Knowledge Acquirement and Academics included student discussion regarding their academic strengths and weaknesses. Their responses ranged from specific classes, like Biology, general academic skills, like math or writing, to various knowledge acquirement skills, like time management, procrastination, and study habits. There were no identifiable trends in their responses. Responses between Applicants and Nonapplicants were similar.

Sense of belonging / I will graduate.

Nonapplicant responses indicated that family support provided confidence and expectations for success that led students to respond that they felt that they did belong in college. Applicants' responses indicated that their sense of belonging and confidence that they would graduate were not solely grounded in family support.

Four of the five Applicants indicated that their parents had not graduated from college and that the students felt like they were on their own when it came to the process of going to college. Applicant comments indicated that without the same degree of parental logistical support as Nonapplicants, they were more self-reliant than Nonapplicants. Applicant goal setting, exploration of major/career path were more advanced than those of Nonapplicants. Furthermore, Applicants had stronger faculty and staff interactions with faculty and staff members outside of Key Community faculty and staff. In short, it was likely that the sense of belonging and confidence that Applicants held that they will graduate was based on the physical effort and mental energy they have put into their college career.

Diverse, social involvement.

The theme, Diverse, Social Involvement, is composed of three codes: Social Connections, Diversity, and Student Involvement. The Applicant's responses indicated that these codes were interconnected.

Social connections.

Respondent statements indicated that the Applicants had less developed social circles than Nonapplicants. The Applicant connections were generally formed in a similar means as Nonapplicants. Some of the social connections were the result of interactions with other Key participants in the residence halls and in Key programs, especially through classes and community services programs. Other connections were developed through common interests in student organizations. While professional student organizations were mentioned multiple times, the most commonly cited types of organizations students cited as an important to their social connections were service organizations and cultural organizations. The other most commonly discussed issue was the interest by all students in furthering their understanding or the understanding of others regarding diversity issues.

The difference between populations was found in the smaller social circles maintained by the Applicants as compared to the Nonapplicants. Maria came to Colorado State University from California with her best friend. "I have one close friend here and other friends that I hang out with randomly." Vicki had a sister at CSU and she spent much of her social time with her sister and her sister's friends, "I've really grown to like [my sisters friends]." Meg stated, "I would not say I have a social circle . . . I have a

couple friends here and my best friend lives in Arizona." Of the Applicants, Olivia seemed to have the largest circle of friends, but the group was limited to, "the people in my hall and the Key Explore students that live with me". When asked what kind of social activities the Applicants enjoyed, they cited several individually oriented activities: working out, surfing the internet, watching You-Tube videos, and attending campus programs.

Student involvement.

There were no trends identified in the types of involvement opportunities to which the Applicants were affiliated. Two of the five Applicants responded that their social connections were based in cultural student organizations, two were involved in professional organizations and practicum experiences, and three of the students acknowledged that they participated in community services.

Vicki and Joy viewed their involvement in the cultural student organization, Africans United, as "an opportunity to give back to the community by teaching [others] about Africa." The service organizations were opportunities for Meg and Olivia to give back to the community. Olivia found her organization, Alpha Phi Omega, to be a place to socialize with like-minded people. The responses of Nonapplicants regarding student involvement were similar to those of Applicants with one exception. The Applicants participated in a similar number of organizations, but they did not view these organizations as social circles as Nonapplicants did.

Diversity.

The findings in the diversity code for Applicants were similar to those of Nonapplicants. The line between student involvement and diversity not easy to identify, but the distinction is necessary to account for the participants interest in learning about diverse issues outside their student involvement opportunities. Joy, an African-American Applicant, talked about an experience she had at an off-campus party where she was called the N word and discussed the challenges she had in adjusting to a predominantly White college campus after going to a very diverse high school. Meg, a Caucasian Applicant, and Maria, a Hispanic Applicant, both indicated that they attended high school campuses that were more diverse than CSU and that they felt comfortable interacting within the diverse climate of the Key Communities.

Olivia, a Caucasian Applicant, commented that her high school was not as ethnically diverse as the Key Communities. However she grew up in the San Francisco-area and struggled to understand the homophobia she found at Colorado State University.

The theme, Diverse, Social Involvement was identified for the connections students made between the development of their social connections, student involvement choices, and their interest in issues related to diversity.

Applicant theme relationships.

The responses of the Applicants indicated that the participants, generally speaking, had strong Financial, Emotional, and Academic Support characteristics. This support differed from the Support to Belonging theme of Nonapplicants in that the Applicants were more actively engaged in their Classroom to Career theme. With family

support that was less adept at offering practical support in navigating the college experience, Applicants were forced to place more effort and energy into learning how to navigate the college experience by building connections with more faculty and staff members than Nonapplicants.

Applicant responses indicated that they were more engaged in the codes that comprise the Classroom to Career theme: Goal Setting, Major/Career Path, Knowledge Acquirement and Academics, and Sense of Belonging/I Will Graduate. It is interesting that the Sense of Belonging / I Will Graduate code fell in the Classroom to Career theme for Applicants as opposed to the Support to Belonging on Campus theme for the Nonapplicants. Nonapplicants seemed to derive much of their Sense of Belonging from the support of their parents. For Applicants, their Sense of Belonging was developed in the connections they made navigating the college experience and expending mental effort and physical energy on actually navigating the college process.

While the Applicants did engage in Diverse, Social Involvement there were differences between Applicants and Nonapplicants. Applicants had smaller social circles than the Nonapplicants. The student involvement opportunities and attitudes toward diversity were similar between Applicants and Nonapplicants.

Summary of open/axial/selective coding findings.

The Open/Axial/Selective Coding of the Applicant and Nonapplicant interviews yielded more similarities than differences between these population's codes, themes, and the relationships between them. The codes between the populations differed in two areas: support mechanisms and faculty and staff interaction. Nonapplicants indicated that they

found the majority of the personal and emotional support they required to continue their college experience through their parents. Nonapplicants mentioned faculty and staff support, but the individual faculty and staff members mentioned were connected to the students through the Key Communities.

Most Applicants, while acknowledging that their family was supportive emotionally, felt that their parents were not able to assist the students in navigating the college campus. The difference between Nonapplicants and Applicants was that Applicants seemed to rely on faculty and staff more than Nonapplicants as support mechanisms. Further, Applicants named more faculty and staff members from outside the Key Communities as strong support people in their lives. For these reasons, Nonapplicants had codes for Family Support and for Faculty/Staff Interaction, while Applicants had codes for Family Support and Faculty /Staff Support. Applicants seemed to rely on faculty/staff for support while Nonapplicants seemed to interact with faculty/staff, but not seek support outside of Key Community relationships.

The themes of the populations (see Figures 7 and 8) were also similar to each other but with subtle differences in the relationships between the codes. The system map of the Nonapplicant was comprised of four themes: Social, Diverse Interaction; Classroom to Career; Faculty/Staff Interaction; and Support to Belonging. The Applicant system map was comprised of three themes: Diverse, Social Interaction; Financial, Emotional, Academic Support; and Classroom to Career.

The Diverse, Social Involvement theme was composed of three codes in each population: Diversity, Social Connections, and Campus Involvement. The students of

both populations indicated that, regardless of race/ethnicity, they had an interest in diversity. Some students wanted to teach others about their culture, while other students sought opportunities to learn about other cultures. This shared appreciation of diverse issues seemed to lead to social connections between the students within the Key Communities. These social connections led to shared participation in campus involvement, the third code within the Diverse, Social Involvement theme.

The themes centered around personal support were Support to Belonging for Nonapplicants and Financial, Emotional, and Academic Support for Applicants. The Support to Belonging theme for the Nonapplicants was composed of three codes: Finances, Family Support, and I Belong in College/I Will Graduate. Family was the hub of this theme. The families allowed the majority of the students to feel that finances would not impede their ability to complete college and instilled a sense that the students did belong at college and were expected to graduate.

The Applicants had similar relationships with their families in the theme Financial, Emotional, Academic Support, which includes three codes: Finances, Family Support, and Faculty/Staff Support. The Applicants also indicated that their families were financially supportive of their college education and that their families were emotionally supportive of their efforts at college. However, Applicants indicated that they were not a confident as Nonapplicants that their parents could help them navigate the college experience. Thus the Applicants had to build more connections to the faculty and staff and establish relationships with faculty and staff members outside of the Key Communities on their own.

Because the Nonapplicants did not view faculty and staff as support mechanisms and had fewer connections to them, a one-code theme, Faculty/Staff Interaction was established. While the Nonapplicants recognized the importance of interacting with faculty and staff members, they did not view them as support mechanisms, but as resources for information or knowledge.

The last themes, the Classroom to Career themes, for both Nonapplicants and Applicants included the codes: Major/Career Path, Goal Setting, and Knowledge Acquirement & Academics. These codes were connected by their relationship to goal setting, identifying a major and a career, and acquiring the knowledge to earn a degree in the major. This theme for Applicants was nearly identical with the exception that a fourth code, I Belong in College/I Will Graduate, was included in this theme. It was included because Applicants, having less faith in their family as support for navigating the college experience, believed they did belong in college and that they would graduate, but that they had to take ownership of their college experience if success was to take place.

Chapter VI – Conclusions and Recommendations

Included in this chapter is a review of the purpose, methodology, research population, and research questions. Additionally, the researcher's experiences and hypotheses generated from the findings are summarized. This research generated profiles regarding the characteristics and motivations of first-year students applying to participate in second-year retention programs. While these profiles address existing knowledge gaps for the research population, they also lead to new questions to be addressed in future research.

Purpose of Study

This study addressed the research gap in understanding the *characteristics* of first-year students who choose to apply to participate in second-year retention programs and *why* they choose to apply. Were there background characteristics common to students who desired more structured opportunities as second-year students? Were there noncognitive variables that indicated which students sought the support they would find in a second-year student retention program? Finally, what was the nature of the support these students sought in a second-year experience?

These objectives were facilitated through the application of foundational retention research paradigms, second-year student retention research, noncognitive student variable research, college student development theory, and student retention research, including literature regarding First Generation (First Gen) student and Student of Color (SOC) retention. In the Review of Literature and Theoretical Framework, 16 factors relevant to the persistence of this research population were identified as a conceptual framework:

- Positive Self-concept
- Realistic Self-appraisal
- Understand and Deal with Difference
- Prefers Long-range Goals
- Availability of a Strong Support Person
- Developing Student-Faculty Relationships
- Personal and Emotional Support
- Successful Leadership Experience
- Demonstrated Community Service
- Knowledge Acquired in a Field
- Major Selection
- Career Direction
- Sense of Belonging
- Campus Involvement
- Coping with Stress and Change
- Financial Issues

It was around these factors that the research was framed, questions posed, analysis of data conducted, and conclusions drawn.

Methodology

The study employed a mixed methods explanatory research design, requiring the collection of qualitative data after a quantitative phase to explain or follow up on the quantitative data in more depth (Cresswell & Plano-Clark, 2007). This study was conducted in three phases. Phase I examined the student biographical data and academic performance of the entire research population in to identify any relationships that existed with students who applied to Key Plus. Phase II examined the student biographical data, academic data, and noncognitive survey responses of the 49 students who completed the Noncognitive Questionnaire (NCQ), to identify relationships that existed the collected data and students who applied to the second-year retention program, Key Plus. Phase III consisted of two focus group interviews, one with Key Plus Applicants and the other with

Nonapplicants, designed to expand understanding of trends and relationships identified in Phases I and II, and to gain a deeper understanding of connections between the 16 factors identified as important to second-year student retention and persistence programs and participant Application Status.

Research Population

The research population was comprised of the 337 first-time first-year students who participated in the Key Communities at Colorado State University (CSU), a large, primarily residential, four year, selective, public institution in the Western United States. Research participants were required to be eligible to participate in the second-year retention program. The 2012-13 Key Communities were comprised of participants in one of four first-year retention communities: Key Academic, Key Service, Key Explore, and Key Health Professions.

Research Questions

This study was conducted to answer the following three research questions:

1. What are the characteristics of students who apply to participate in a second-year retention program?

2. What student noncognitive variables reflect which students apply to participate in a second-year retention program?

3. What factors do first-year students consider when determining whether or not they will participate in a second-year retention program?

Researcher Experiences

First, I was challenged in the process of collecting, analyzing, and synthesizing the data to arrive at conclusions in three noteworthy aspects. First, in preparing for the focus group interviews, researcher checked the Colorado State University academic and social calendars and spoke with Key Community staff in an attempt to ensure there were no participant conflicts with the scheduled interviews. However, the researcher failed to account for national events, in this instance the NCAA Men's Basketball Championship game, in the scheduling of the focus group interviews. Two confirmed male participants failed to attend, presumably due to the game. This led to the loss of confirmed participants and the unexpected arrival of qualified candidates to fill the void created by the loss of the confirmed participants. I allowed their participation as they met the basic qualifications for the interviews, but struggled with the fact that the representative sample I had sought, through deliberate random sampling procedures, may have been impacted. In the end, I felt that a larger, less representative research participant pool was more important than a smaller, more representative research pool. As a result, the Nonapplicant focus group populations was not as representative of the Nonapplicant populations as desired, but the number of focus group participants contributed to lively, and informative interview.

Second, in the analysis of data, I was challenged in ensuring personal biases and beliefs regarding what first- and second-year college student experiences have been stated to be in the research literature and what the participants said they were in the focus group interviews. The process of analyzing data and drawing conclusions based upon the data required many moments of checking that the statements were reflections of what the

participants stated and were not reflections of what the researcher believed should be true or what the researcher thought the participants meant. Conceptualized by Van Mannen (1990), I attempted to defend the true nature of the subjects in this research. The quoted statements were cited as an example of a thought by multiple participants or as a counterpoint to an idea shared by multiple participants. Quotes were not included if they were outlying concepts, stated by a single individual, to make a point. Such a point would not have defended the true nature of the subjects in this research and would have impaired the integrity of the research and its conclusions.

Third, while the methodological process was sound in theory, in practice, one glaring issue arose. The second focus group interview brought to light issues that were not discussed during the first focus group interview. In particular, questions surrounding financial issues and social circles were identified as critical during the second focus group interview with the Applicants but the opportunity to verify and compare the Applicant responses against the Nonapplicant responses had passed and the opportunity to gather the Nonapplicants for follow up questions was not an option. Multiple focus groups of each population or multiple interviews with the same focus group participants may have allowed for more depth and follow-up questions on critical issues.

While it is easy to dwell on the challenges of this research, there were successful aspects to this research as well. In particular, this research was conducted from nearly 1,000 miles away. This research would not have been successful without significant support from staff at the institution and the specific program I studied. Communication with CSU's Institutional Review Board, my CSU faculty sponsor, and the Key

Community program staff ensured that the research was valid, reliable, and useful, based on accurate institutional information, and met the research requirements of both The University of Texas at Austin and Colorado State University.

In preparation for this research, I contacted colleagues at CSU about a year before I began the research and proposed my research to them. My objective was to addresses research gaps in higher education related to student retention and persistence while ensuring the research was useful to the program I investigated. They offered suggestions for research objectives, data to collect and analyze, and suggestions for interview timelines that were invaluable to the outcome. Furthermore, I consulted my contacts when the data did not seem to make sense or when I had difficulty connecting the results with Key Community practices or requirements. The relationships and communication between the institution and the researcher are important in any research, however, they are vital when the physical distance requires a significant commute to conduct research.

Conclusions

The conclusions drawn from the collected and analyzed data are divided into two categories: Characteristics of Second-year Retention Program Applicants and Motivations of Second-year Retention Program Applicants. It is important to note that these conclusions are specific to Colorado State University's Key Communities and the research population they encompass.

Characteristics of second-year retention program applicants include:

1. Applicants to Second-year Retention Programs were more likely to be Non-Pell Grant Eligible Students than Pell Grant Eligible students.

2. Applicants to Second-year Retention Programs were more likely to be Students of Color.
3. Applicants to Second-year Retention Programs were more likely to be First Generation students.
4. Applicants to Second-year Retention Programs had positive First-year Retention Program experiences.

Motivations of second-year retention program applicants include:

1. Applicants were willing to commit their financial resources these resources to live on-campus in the Key Plus community. Nonapplicants chose not to apply due to their motivation to reduce their educational costs by seeking less expensive housing off campus.
2. Students were motivated to apply to Key Plus in order to continue certain aspects of their first-year experience including:
   a. to continue to live in a diverse community,
   b. seeking assistance from strong support persons in navigating the college experience,
   c. to ensure that the social connections provided by living in a second-year retention community are available.

Characteristics of second-year retention program applicants.

The characteristics of students who applied to participate in Key Plus include: Non-Pell Grant eligibility, Students of Color, First Generation students, and First-year retention program participants in either the Key Academic or the Key Health Professions communities.

Non-Pell Grant eligible students.

Non-Pell Grant eligibility was a characteristic of Applicants to second-year retention programs. First-year students, who were not Pell Grant eligible applied to the second-year retention program at a higher rate than Pell Grant eligible students. I expected a higher percentage of Pell Grant Eligible students would apply to the second-year retention program, because the majority of Key Plus participants have historically

been Students of Color and First Gen students, populations that are more likely to have financial need than their peers (Davis, 2010).

Many Pell Grant eligible Nonapplicants believed that they could reduce their college expenses by living off-campus during their second-year of college, allowing them to find housing options less expensive than on-campus residence hall rates and avoid the costs associated with the on-campus meal plan. For these students, the cost of living on-campus is a barrier to participation in a program that may increase their chances of graduation. This is not the only financial challenge affecting student decisions about their college experience. Student persistence research has shown that students who have financial need consider multiple issues related to financing their education: student loans, part-time employment, scholarship applications, and withdraw from college to minimize family or personal debt (Gohn et al., 2001; Schaller, 2000).

While financial concerns are important to Pell Grant eligible students, many non-Pell Grant eligible students also indicated financial concerns as well. For student whose parents were paying for college, the students felt the need to financially contribute to their college education, by applying for scholarships or by seeking part-time or summer employment to fund “non-essential” expenditures.

In 2005, St. John, Paulsen, and Carter argued that a complex relationship exists between race, socioeconomic status, and financial aid. This study illustrates these complexities as a diverse population of students makes educational decisions with an emphasis upon available financial resources rather than available educational resources.

Students of Color.

A second characteristic of students who sought participation in a second-year retention program was being a Student of Color. Students of Color indicated that the peer support and diversity of their first-year community was important to them and that they sought to continue that experience in their second-year. The interest in Key Plus by Students of Color may have been due to the contrast in diversity found outside of the Key communities at CSU, a predominantly White institution. The Key communities and Key Plus may have felt like a safer or more comfortable environment for Students of Color than living outside of the Key communities. Existing research suggests that first-year students cope with transitions related to how they view themselves, their relationships, and their academics (Schaller, 2000). For Students of Color, their identity development and "their need to make sense of themselves in a new environment" (Schaller, 2010, p. 26) may be easier in a diverse community like Key Plus. Other research has indicated that providing continued opportunities for diverse interactions are beneficial to student identity development, persistence, and satisfaction (Kuh & Hu, 2001; Kuh et al., 2001; Sedlacek, 2004).

It is unlikely that Students of Color would consciously consider their race or ethnicity as a factor they consider when deciding whether or not to apply to a second-year retention program. However, while Students of Color may not recognize the reason for their desire to continue to live in a diverse environment, this study indicates that they do seek out such an environment at a greater rate than their Caucasian peers.

First Generation students.

Like being a Student of Color, a student's status as a First Generation student was likely not a conscious factor in their decision to apply to participate in a second-year retention program. However there were some needs, common to First Generation students, which made them likely to seek such participation. In particular, First Generation students in this study stated that while they received emotional support from their families, their families were not able to provide adequate support in navigating the college experience. First Generation students identified challenges that required assistance from knowledgeable campus faculty and staff including: selecting classes, choosing a major, finding academic resources, and handing issues in their residence halls.

Their need for strong support persons, in the form of campus faculty and staff members, to assist in the navigation of the college experience was greater than the non-First Generation students, who indicated that their families were able to provide both emotional support and practical support in the issues they faced at college. This is consistent with existing literature on First Generation students, which indicates that the need for strong support and assistance in navigating the college experience is common to this population (Davis, 2010; Ishitani, 2003, 2006).

First-year retention program community experience.

Students participating in the Key Academic and Key Health Professions Communities were more likely to apply to the second-year retention community than participants in the other first-year retention programs. Therefore, the first-year experience

was identified as an important characteristic of second-year retention program participants. The existing literature supports the claim that first-year experiences impact college student persistence to graduation (Astin, 1987; Tinto, 1987, 1993; Upcraft et al, 2005). It is logical that a positive first-year retention community experience would increase the likelihood of seeking a second-year retention program experience and *vice versa*. However, there are other factors to consider when trying to identify the reasons behind the significance of this characteristic.

It is plausible that the first-year community the students were drawn to as they entered college holds the key to understanding the reason for their decision to apply to a second-year retention community. Students seeking the specific support provided by Key Academic may be more likely to apply to a second-year retention program than students who enrolled in Key Service. Furthermore, there is the possibility that the communities that produce a larger proportion of Applicants to second-year retention programs may change year-to-year based upon the programmatic subtleties and students satisfaction with their specific experience. For example, if a negative classroom or residence hall experience, common to Key Service participants, took place, it may lead them to shy away from further participation in Key Plus. Unfortunately, this research was unable to identify the cause to the significance of this characteristic. Adopting a methodology that allowed for participant interviews and data analysis followed by a second set of interviews, adjusted to incorporate the issues that required further investigation, would have increased the effectiveness of this research and would have aided in the

identification of why first-year program community experience was a characteristic of applicants to a second-year retention program.

Motivations of second-year retention program applicants.

The motivations that students consider when determining whether or not they will participate in a second-year retention program include: financial situation and their desire to continue aspects of their first-year experience which encompass: living in a diverse environment, seeking assistance from strong support persons in navigating the college experience, and maintaining an available social network.

Financial Situation.

A significant number of non-Pell Grant eligible students were willing and financially able to live in on-campus housing as a second-year retention program participant. Responses from these students indicated that they felt that the convenience of living on-campus, near their classrooms and various other academic and campus resources, as a part of the Key Plus community was in their best interest. Existing research justifies their desire to live on campus, indicating that living on campus is a positive indicator of student retention (Astin, 1993; Pascarella, 1993).

Most striking was the stated motivation for Pell Eligible students NOT to apply to participate in Key Plus. They felt that living on-campus was too expensive and that they could mitigate the costs of college by living off-campus. In particular the cost of the on-campus meal plan was cited as prohibitive.

Pell Grant eligibility is determined, in part, by financial need. The formula to determine financial need, according the U.S. Department of Education's Federal Student

Aid website (2013) is based on the difference between the Cost of Attendance (COA) at a school and the Expected Family Contribution (EFC) toward the educational costs. The COA changes from school to school, but the EFC is static. Students, who were motivated to minimize the costs of their education, found that one of their best options was to not seek participation in a second-year living program.

Desire to continue or avoid a continuation of their first-year experience.

The motivation to participate in a second-year retention program was based on the student's desire to continue their first-year experience in one of three ways. First, the Applicants sought to continue to live in a diverse community. Second, Applicants wanted to continue to receive the assistance from strong support persons in navigating the college experience. Third, these students applied to Key Plus to maintain the availability of social connections into their second year of college.

Desire to live in a diverse community.

Students, who feel comfortable and safe in a diverse community of students during their first-year of college are likely to be motivated to seek out such an environment during their second-year, as was the case in this study. There were two categories of students this study found to be motivated to seek out a diverse environment: Students of Color and students who sought to experience and learn more about diversity.

For Students of Color who valued living in a diverse environment, participation in Key Plus may have been their best option. Literature indicates that the retention of underrepresented minorities, in part, requires building a community that is safe and comfortable for students to live in (Hrabowski, 2005). Such an environment allows

Students of Color to explore their cultural identity and their relationships with students who share their cultural identity and with those from other backgrounds (Schaller, 2010).

The students who had an interest in learning more about issues that encompass diversity, especially Caucasian students, also had need of a safe community that encourages engagement regarding diversity related issues (Jones, 2005). This study has found that many students felt their first-year experience provided an opportunity to build friendships and to share and compare their life experiences with students who were raised in a different environment and who had different beliefs and values. While their motivations may be different, Applicants to Key Plus shared the motivation to live in a diverse environment during their second year of college.

Continued guidance from strong support persons.

Other students were motivated to seek participation in a second-year retention program in order to continue to receive the assistance of strong support persons in navigating the college experience that they received as first-year students. Key Plus Applicants indicated that the support they required to navigate the college experience was not always available from their families. Applicants viewed the faculty and staff of the Key Communities as support mechanisms for their day-to-day questions and challenges and as resources for long-term issues as they work to identify their academic majors, select classes, and determine their future careers. The presence or availability of a Strong Support Person was identified throughout the review of literature as beneficial to the persistence of all students (Bean & Eaton, 2001; Sedlacek, 2004; Tinto, 1993), but especially for First Generation students (Davis, 2010; Ishitani, 2003).

Sedlacek defined a Strong Support Person as a trusted, supportive figure who conveys advice, particularly in times of crisis (2004). For many first-year students, especially First Generation students, there are many new experiences in and out of the classroom that may be construed as a crisis. The students who chose to apply to the second-year retention program indicated that while they felt emotionally supported by their families, they did not feel that their families could offer knowledgeable guidance with all aspects of the college experience. Their motivation to apply to Key Plus was grounded in their desire to maintain a network of Strong Support Persons into their second-year of college to help them address the crises that will arise as they navigate their second-year of college.

Maintain an available social network.

Applicants to Key Plus had smaller social circles than students who chose not to apply to Key Plus. Though the Applicants indicated that they were comfortable with their social group, they also indicated that they did not regularly participate in various social activities within their first-year retention program and other student organizations to which they belonged, but engaged these social groups as they chose. Nonapplicants felt more comfortable establishing their own social circles off-campus and without the continued support of Key Plus during their second-year.

The Applicants may not have overtly considered whether they had a strong social circle or the ability to make social connections. However, Applicants who did not have large social circles, may have been motivated to pursue participation in Key Plus to ensure they had a social community in place when they wanted to take advantage of it.

The characteristics and motivations of the students who applied for participation in Key Plus were identified in the analysis of the data collected in this study and, as noted, the findings of this research support previous findings. However, new questions were uncovered that will require further investigation.

Recommendations for Further Research

This study has identified research methods and specific areas for further student retention and persistence study that will enhance practitioner understanding and allow for the development of more effective programs to meet the needs of second-year college students.

Expand research population and number of research sites.

Mixed methods studies are time consuming and difficult to manage when the researcher is required to commute for interviews. However, as a practitioner, I find the results to be more applicable to the practice of student retention. I believe that similar research involving larger research populations and multiple university campuses would be useful to verify the validity and reliability of the results of this study.

The Key Communities have historically drawn a higher percentage of Students of Color and First Generation students than the general student population. As such, this research site may not be representative of other programs. By expanding this research to multiple institutions, the findings may be more representative of first-year students seeking participation in second-year student retention programs.

The size of the research population (n = 337) created some difficulties in the context of this mixed methods research methodology. In implementing a methodology

with three separate phases of data collection, there was little margin for error in the recruitment of research participants. Though a larger research population may not guarantee a more representative population, it would have allowed for greater flexibility in the recruitment of research participants.

Expanded data collection timeframe.

It is worth noting that the timing of the study may have drawn a disproportionate number of participants who intended to continue through to their second-year of college. Only two participants, Nonapplicants Amber and Kojo, offered responses that indicated that they had considered not continuing to their second year, though both stated that they intended to return to campus for their second-year. The act of applying to a second year program indicates, as the five Applicants did, an intention to continue their education. The Nonapplicants may not have had the intention of persisting to their second year and chose not to apply to Key Plus, skewing the findings of this study. An extended research timeline would allow the researcher to verify persistence of the research population to their start of their second-year rather than, as this research methodology allowed, identify the student's *intention* to persist.

Use of Interactive Qualitative Analysis methodology.

Implementation of an Interactive Qualitative Analysis (IQA) methodology would be useful in establishing a more accurate systems map that establishes the process of persistence for both Applicants and Nonapplicants. While the system map in this study was based upon focus group responses, the meaning of participant responses were, unavoidably, based upon my interpretations. While steps were taken to ensure these

responses represented the thoughts and meanings of the participants, IQA methodology allows the participants to generate the systems map, with less researcher interpretation (Nothcutt &McCoy, 2004).

Continued research related to diversity and student persistence.

The responses of both Key Plus Applicants and Nonapplicants indicate a positive response to the diversity they experienced as a part of the Key communities during their first-year. These positive responses came from both Students of Color and Caucasian students. This is a subject that merits further study. What is the impact of participation in a small, diverse community for student persistence on a predominantly White campus? There have been many studies on the experiences of students of color at predominately White universities (Hurtado et. al., 2007; Hurtado et. al., 2008). Changing the focus of the research to discover how participation in a diverse community on a predominantly White campus affects student perceptions and their persistence continues to be an important research topic that merits further examination.

Impact of finances on second-year college students.

Many of the Pell Eligible students stated that the cost of living on campus was prohibitive to their seeking to participate in Key Plus. Though this research did not address the question, it would be interesting to note, if the cost of living on-campus was equal to that of living off-campus would Pell Grant eligibility continue to be a factor in who chooses to apply to Key Plus. Further, Key Plus does allow students to participate in Key Plus and live off-campus through the Leaders Engaged in Academics, Diversity and

Service (LEADS) program. It would be interesting to study their financial satisfaction with the LEADS experience while living off-campus.

While this study allowed for the identification of suggestions for the implementation of future research methodology and focuses of study related to second-year student persistence, it also generated findings that should be applied to the development and operation of second-year student retention programs.

Recommendations for Practice

While the findings of this research is limited to a small sample of students from one institution, it still provides practitioners with valuable information regarding who students seeking to participate in a second-year retention program are and why they are motivated to apply. It would behoove student affairs professionals to identify the characteristics and motivations of rising second-year students at their own institutions in order to best provide the environment, programs, and support they require to become third-year students. Based on the research population of this study, the following are recommendations for practice in supporting second-year students: minimize the effect of financial need on second-year retention program participation, continue to recognize the importance of a diverse community for student retention, and implement campus-wide Strong Support Person training, and encourage student engagement with campus faculty and staff members.

Minimize the effect of financial need on retention program participation.

Practitioners and institutions should be cognizant of the impact on-campus costs may have on student participation in retention programs. Often the students who would most

benefit from retention program participation, Students of Color, First Generation Students, and students who are less academically prepared for college than their peers, are also Pell Grant eligible and have limited financial resources. Providing students with accurate cost-of-living data for on-campus and off-campus living may address any misconceptions that students may be under if the difference between the living options is not significant. However, if the costs of living on-campus is significantly higher than living off-campus, it would increase the retention of low income students if a means of reducing the costs of on-campus housing were identified and implemented. Whether a reduction in housing costs for program participants, a subsidization of housing costs for Pell Grant eligible students, or other solutions, finding a means to reduce the costs of living on campus for second-year students in retention programs may increase the number of students interested in participating in a second-year retention program and the overall persistence of second-year students.

Continue to recognize the importance of a diverse community.

For the majority of practitioners, this recommendation may already be in practice. However, it is imperative that diverse on-campus communities are available to students, especially on predominantly White campuses. The Applicants in this study tended to be Students of Color and/or students with an interest in developing a deeper understanding of diversity. Indications were that the Key Communities do create a safe environment for Students of Color and an environment that allows for discussion and exploration of issues related to diversity. Many students applied to Key Plus with the understanding that their second-year experience would be similar to their first-year, as related to diversity within

their community. Institutions would be wise to begin or continue to provide such programs to address the needs of students with an interest in living within a diverse community.

Implement campus-wide "Strong Support Person" training.

Institutions should create a Strong Support Person training program for campus employees to ensure that all members of the campus community have the knowledge and ability to provide support to the students who approach them and the knowledge to direct them to resources to address their needs. While some institutional employees understand the principles of providing support for college students, not all employees will understand the basics of college student support. As many practitioners, who have post-baccalaureate degrees in Student Affairs or Counseling related fields, can attest, providing strong support encompasses more than just advice on how to write a paper or how do I deal with a messy roommate. At various times in their college careers, students will need academic, professional, personal, developmental, and emotional support. A campus-wide basic understanding of the First Generation students, Students of Color, and Pell Grant eligible students and their needs, will increase the overall campus effectiveness in supporting these students.

Developing campus wide competency is also important because students choose their strong support persons based upon their own needs, feelings, and the people they have met. The students do not always make their choice based upon who has the training to effectively support them. While some staff and faculty have the training and experience to support students, faculty members, university police members,

administrative assistants and other campus employees have significant contact time with students and may be viewed by the students as a person they trust who can proved the support they require. The best way to ensure that all employees are prepared to offer support to the students who come to them for guidance is to train them all. Training all employees allows the institution to know that basic, accurate information has been delivered to the employees regarding best practices in supporting college students and allows the institution to disseminate accurate information regarding the resources available to the students.

Generate opportunities for students to engage with faculty and staff.

Practitioners should provide opportunities or requirements to encourage first-year students to engage their faculty instructors and staff members in areas of specific services, and outside of the first-year retention program. The Applicants in this study indicated that their participation in a first-year program had encouraged relationships with academic advisors and professional and student staff. While this is a positive outcome, the majority of the participants indicated that there is a fear of, “looking stupid” or “bothering” faculty and staff outside of the Key communities. For the students who will not continue on with the second-year retention program, their first-year is the students best year to build strong, supportive relationships that will guide them until they graduate. For the students who apply to second-year retention programs, these relationships can be built upon during their second-year and new resources introduced. However, this will be more effective if strong support persons have been introduced early

in the first-year and faculty and staff members encourage their students to find additional support persons.

Concluding Statement

The study of college student persistence is a complicated mire of student background factors (e.g., gender, race), academic ability and performance measures (e.g., high school class rank, college grade point average), noncognitive issues (e.g., Successful Leadership Experience, Availability of Strong Support Persons), the various environments in which students were raised, and the perceptions these environments create within each student. This research model is likely to generate different results at different colleges and universities depending upon the size of the institution, region in which the institution is located, and the institutional priorities of the institution. This research is best suited to identify the profiles and motivations of first-year students at Colorado State University to identify which students will seek participation in Key Plus and why they seek such participation.

The conclusion of this study is that the characteristics of students who decide to apply to a second-year retention program are: non-Pell Grant eligibility, Students of Color, First Generation students, and participation in certain First-year retention programs. The motivations of these students to apply to a second-year retention program include: financial situation, their desire to continue or avoid their first-year experience, and the size of their campus social network.

Appendices

APPENDIX A: Electronic Survey Participant Recruitment Email

[Email sent by the Clinical Researcher on behalf of the Researcher]

Hello,

My name is Brian Obert and I am a doctoral candidate in the Department of Higher Education Administration at The University of Texas at Austin. I am writing to request your assistance by participating in my research study that examines rising second-year students at Colorado State University. This phase of the study specifically seeks to investigate the noncognitive characteristics of this population. For this study, only rising second-year students currently participating in one of the Key Communities are eligible for participation.

Students interested in participating should click on the link below and follow the directions to complete a 15 minute survey. Participation in the study is completely voluntary and all participants can choose not to participate at any point in the study without any adverse consequences to their current or future relationship with the researcher, The University of Texas at Austin or Colorado State University. Students who choose to participate will be automatically entered in a drawing for one of three $25 Visa gift cards.

Your name and email address will be kept during the data collection phase for data tracking and contact purposes only. A limited number of research team members will have access to the data during data collection. Survey responses will have identification information will be stripped from the final dataset. Information collected will be kept confidential and stored in a secure location.

This study aims to provide a deeper understanding of second-year student retention factors and needs for successful persistence through graduation. Through this research, I hope to contribute to the field of Higher Education Administration findings that allow practitioners more insight about the overall second-year college student and their needs to improve the retention rates of all second-year college students.

If you are interested in participating in this study or have any questions, please feel free to contact me via email or phone. In addition, if you have any questions about your rights as a research participant, or if you have complaints, concerns, or questions about the research, please contact Jody Jensen, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects at (512) 232-2685 or the Office of Research Support at (512) 471-8871.

Link to: [Informed Consent and Survey]

Thank you for your consideration.

Brian K. Obert
bkobert@austin.utexas.edu
512-573-7376

APPENDIX B: Electronic Survey Consent Form

[This was the first page of the electronic survey. Participants were not be able to proceed without offering their consent by clicking the "I understand" button.]

Consent to Participate in Internet Research

Identification of Investigator and Purpose of Study

You are invited to participate in a research study, entitled "College Student Interest in Second-year Retention Programs: An Examination of Second-year Retention Program Applicant Profiles and Motivations". The study is being conducted by Brian Obert as part of his Doctoral research in the Higher Education Administration Department of The University of Texas at Austin.

Department Mailing Address:
Higher Education Administration Program
Department of Educational Administration
The University of Texas at Austin
1 University Station D5400
Austin, Texas 78712-0374

Investigator Mailing Address:
Brian Obert
805 Kavanagh Dr.
Austin, TX 78748

Department Phone Number:
512-471-7551

Investigator Phone Number:
512-573-7376

Department Email Address:
heap@austin.utexas.edu

Investigator Email Address:
bkobert@austin.utexas.edu

This study aims to provide a deeper understanding of second-year student retention factors and needs for successful persistence through graduation. Your participation in the study will contribute to a better understanding of the needs of second-year students and how universities can better meet their needs. You are free to contact the investigator at the above address and phone number to discuss the study. You must be at least 18 years old to participate.

If you agree to participate:
You will complete an online survey about your educational experiences and attitudes. The online survey will take approximately 15 minutes. Your participation in this survey gains you entry into a drawing for one of three $25 Visa Gift Cards. The drawing will be held on April 1, 2013. Winners will be notified by email and the winners Gift Cards will be available at the CASA Office of Colorado State University.

Risks/Benefits/Confidentiality of Data

There are no known risks for participating in this online survey. There will be no costs for participating, nor will you benefit from participating. Your name and email address will be kept during the data collection phase for data tracking and contact purposes only. A limited number of research team members will have access to the data during data collection. Identification information will be stripped from the final dataset.

Participation or Withdrawal

Your participation in this study is voluntary. You may decline to answer any question and you have the right to withdraw from participation at any time. Withdrawal will not affect your relationship with The University of Texas or Colorado State University in anyway. If you do not want to participate either simply stop participating or close the browser window.

If you do not want to receive any more reminders, you may email me at bkobert@austin.utexas.edu and you will be removed from the email list.

Contacts

If you have any questions about the study or need to update your email address contact the researcher Brian Obert at 512-573-7376 or send an email to bkobert@austin.utexas.edu. This study has been reviewed by The University of Texas at Austin Institutional Review Board and the study number is 2013-01-0051.

Questions about your rights as a research participant.

If you have questions about your rights or are dissatisfied at any time with any part of this study, you can contact, anonymously if you wish, the University of Texas Institutional Review Board by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu.

If you agree to participate, click on the "I understand" button below.

Please print a copy of this page for your records.

Thank you for your time.

Brian Obert
Doctoral Candidate
The University of Texas at Austin

APPENDIX C: Noncognitive Questionnaire Survey Questions

Noncognitive Questionnaire Survey was used, with permission from Dr. William Sedlacek (personal communication, September 24, 2012) from Sedlacek's 2004 book, *Beyond The Big Test . . . An Alternative Approach.*

Online Instructions:

(As per NCQ) You're being asked to complete a brief questionnaire which is mostly about your thoughts and feelings. In addition, some demographic information is requested. There are no right or wrong answers, so try to answer as honestly as you can. It is also important that you not skip items: please attempt all of them. All information provided will be kept confidential.

The questionnaire takes approximately 15 minutes to complete.

Noncognitive Questionnaire:

1. Your GEN ID# is: (Open response 10 character limit)
2. Your sex is: (Male/Female)
3. Your age is: _____years (Open Response 2 character limit)
4. Your father's occupation: (Open Response 64 character limit)
5. Your mother's occupation: (Open response 64 character limit)
6. Are you Hispanic or Latino? (Yes/No)
7. Please select the racial category or categories with which you most closely identify. (Check boxes Multiple Responses allowed)
    a. American Indian or Alaska Native
    b. Asian
    c. Black or African American
    d. Native Hawaiian or Other Pacific Islander
    e. White
8. How much education do you expect to get during your lifetime? (Check boxes One Response)
    a. College, but less than a bachelor's degree
    b. B.A. or equivalent
    c. One or two years of graduate or professional study (master's degree)
    d. Doctoral degree such as M.D., Ph. D. and so on
9. Please list three goals you have for yourself right now: (Open Responses 400 character limit)
    a. _____

b. _____
c. _____

10. About 50 percent of university students typically leave before receiving a degree. If this should happen to you, what will be the most likely cause? (Check boxes, One Response)
    a. Absolutely certain that I will obtain a degree
    b. To accept a good job
    c. To enter military service
    d. It will cost more than my family can afford
    e. Marriage
    f. Disinterest in study
    g. Lack of academic ability
    h. Insufficient reading or study skills
    i. Other
11. Please list 3 things that you are proud of having done: (Open Responses 400 character limit)
    a. _____
    b. _____
    c. _____

Please indicate the extent to which you agree or disagree with each of the following items. Respond to the statements below with your feelings at present or your expectation of how things will be. Write in your answer to the left of each item. [All responses will be Open Responses with a One character limit]

1-Strongly Agree 2-Agree 3-Neutral 4-Disagree 5-Strongly Disagree

12. _____ The university should use its influence to improve social conditions in the state.
13. _____ It should **not** be very hard to get a B (3.0) average at this school.
14. _____ I get easily discouraged when I try to do something and it doesn't work.
15. _____ I am sometimes looked up to by others.
16. _____ If I run in to problems concerning school, I have someone who would listen to me and help me.
17. _____ There is no use in doing things for people; you only find that you get it in the neck in the long run
18. _____ In groups where I am comfortable, I am often looked to as a leader.
19. _____ I expect to have a harder time than most students at this school.

20. _____ Once I start something, I finish it.
21. _____ When I believe strongly in something, I act on it.
22. _____ I am as skilled academically as the average applicant to this school.
23. _____ I expect I will encounter racism at this school.
24. _____ People can pretty easily change me even though I thought my mind was already made up on the subject.
25. _____ My friends and relatives **don't** feel I should go to college.
26. _____ My family has always wanted me to go to college.
27. _____ If course tutoring is made available on campus at no cost, I would attend regularly.
28. _____ I want a chance to prove myself academically.
29. _____ My high school grades **don't** really reflect what I can do.
30. _____ Please list offices held and/or groups belonged to in high school or in your community.

APPENDIX D: Noncognitive Questionnaire Survey Scoring Key

The Noncognitive Questionnaire Survey was used, with permission from Dr. William Sedlacek (personal communication, September 24, 2012) from Sedlacek's 2004 book, *Beyond The Big Test . . . An Alternative Approach.*

NCQ Scoring Key
Question 7. – Use to score for *Self-Concept (I*) using this rubric:

Option 1 = 1; 2 = 2; 3 = 3; 4 = 4; no response =2

Question 8. – Use to score for *Long Range Goals (IV)* and *Knowledge Acquired in a Field (VIII)*

A. Use to score for *Long Range Goals (IV)* by coding according to this scheme:

1 = a vague and/or immediate, short term goal (for example, "to meet people," "to get a good schedule," "to gain self-confidence")

2 = a specific goal with a stated future orientation that could be accomplished during undergraduate study (for example, "to join a sorority so I can meet more people," "to get a good schedule so I can get good grades in the fall," "to run for a student government office")

3 = a specific goal with a stated future orientation that would occur after undergraduate study (for example, "to get a good schedule so I can get the classes I need for graduate school," "to become president of a Fortune 500 company")

B. Use to score for *Knowledge Acquired in a Field (VIII)* by coding according to this scheme:

1 = not at all academic or school-related; vague or unclear (for example, "to get married," "to do better," "to become a better person")

2 = School related, but not necessarily or primarily education-oriented (for example, "to join a fraternity," "to become student body president")

3 = directly related to education (for example, "to get a 3.5 GPA," "to get to know my teachers")

SCORING – Find the mean for each dimension (for example, long range goals) and round to the nearest whole number.

Question 9. - Use to score for *Self-concept(I)* and *Self-Appraisal (II) using this rubric:*

Option 1 = 4; 2 through 9 = 2; no response = 2

Questions 10. - Use to score for *Self-concept (I)* by coding according to this scheme for each accomplishment:

1 = at least 75 percent of applicants to your school could have accomplished it (for example, “graduated from high school,” “held a part-time summer job”)

2 = at least 50 percent of applicants to your school could have accomplished it (for example, “played on an intramural sports team, ” “was a member of a school club”)

3 = at least 25 percent of applicants to your school could have accomplished it (for example, “won an academic award,” “was captain of football team”)

SCORING – Find the mean for each dimension (for example, long range goals) and round to the nearest whole number.

Questions 11 through 28 - positive (+) items are scored as they are so that 5 = 5, 4 = 4, 3 = 3, 2 = 2, and 1 = 1. Negative (-) items are reversed so that 1 = 5, 2 =4, 3 = 3, 4 =2, and 5 = 1

11	-	Use to score for *Racism (III)*
12	-	Use to score for *Realistic self-appraisal (II)*
13	+	Use to score for *Long-range goals (IV)*
14	-	Use to score for *Leadership (VI)*
15	-	Use to score for *Availability of strong support (V)*
16	+	Use to score for *Community service (VII)*
17	-	Use to score for *Leadership (VI)*
18	+	Use to score for *Racism (III)*
19	-	Use to score for *Long-range goals (IV)*
20	-	Use to score for *Positive self-concept (I)*
21	-	Use to score for *Realistic self-appraisal (II)*
22	-	Use to score for *Racism (III)*
23	+	Use to score for *Positive self-concept (I)*
24	+	Use to score for *Availability of strong support (V)*
25	-	Use to score for *Availability of strong support (V)*
26	-	Use to score for *Racism (III)*
27	-	Use to score for *Racism (III)*
28	-	Use to score for *Positive self-concept (I)*

Question 29. – Use to score for Leadership (VI), Community service (VII), and Knowledge acquired in a field (VIII). Each Organizations is given a code for A, B, and C below.

A. Use to score for Long Range Goals (IV) by coding according to this scheme:

1 = ambiguous group or no clear reference to activity performed (for example, “helped in school”)

2 = membership but no formal or implied leadership role; it has to be clear that it is a functioning group and, unless the criteria are met for a score of 3 as described below, all groups should be coded as a 2 even if you, as the rater, are not familiar with the group (for example, “Fashionettes,” “was part of a group that worked on community service projects through my church”)

3 = leadership was required to fulfill role in the group (for example, officer or implied initiator, organizer, or founder) or entrance into the group was dependent upon prior leadership (for example, “organized a tutoring group for underprivileged children in my community,” “student council”)

B. Use to score for Community service relatedness (VII) by coding according to this scheme:

1 = No community service performed by group, or vague or unclear in relation to community service (for example, “basketball team”)

2 = Some community service involved, but it is not the primary purpose of the group (for example, “Scouts”)

3 = Group’s main purpose is community service (for example, “Big Brothers/Big Sisters”)

C. Use to score for Knowledge Acquired in a Field (VIII) by coding according to this scheme:

1 = not at all academic or school-related; vague or unclear (for example, “to get married,” “to do better,” “to become a better person”)

2 = School related, but not necessarily or primarily education-oriented (for example, “to join a fraternity,” “to become student body president”)

3 = directly related to education (for example, “to get a 3.5 GPA,” “to get to know my teachers”)

APPENDIX E: Focus Group Participant Recruitment Email

[Email sent by the Clinical Researcher on behalf of the Researcher]

Hello,

My name is Brian Obert and I am a doctoral candidate in the Department of Higher Education Administration at The University of Texas at Austin. I am writing to request your assistance by participating in my research study examining rising second-year students at Colorado State University. The focus group interview phase of the study is designed to investigate the needs and attitudes of students toward their second-year experience. For this study, only rising second-year students currently participating in one of the Key Communities are eligible for participation.

The focus group interview will take approximately 90 – 120 minutes. There will be four to six participants in each interview session all of whom will be asked to, but not required to, respond to 10-15 questions posed by the interviewer. Participation in the study is completely voluntary and participants can choose not to participate at any point in the study without any adverse consequences to their current or future relationship with the researcher, The University of Texas at Austin or Colorado State University. Your name and email address will be kept during the data collection phase for data tracking and contact purposes only. Information collected will be kept confidential and stored in a secure location. A limited number of research team members will have access to the raw data during data collection. Participants will be assigned a pseudonym to protect their identity while allowing the researcher to share participant responses.

Pizza and bottled water will be provided to all participants. Also, each participant will be given a $25 Visa Gift Card upon completion of the focus group interview session. Interested student participants should simply fill in the information requested below and return this email to bkobert@austin.utexas.edu by 6 pm, March 27, 2013. Students selected for the focus group interviews will be notified by email by April 1, 2013 with an exact date, time, and location of the focus group interview.

This study aims to provide a deeper understanding of second-year student retention factors, needs, and attitudes. Through this research, I hope to contribute to the field of Higher Education Administration findings that allow practitioners more insight about the overall second-year college student and their needs to improve the retention rates of all second-year college students.

If you are interested in participating in this study or have any questions, please feel free to contact me via email or phone. In addition, if you have any questions about your rights as a research participant, or if you have complaints, concerns, or questions about the research, please contact Jody Jensen, Ph.D., Chair, The University of Texas at Austin

Institutional Review Board for the Protection of Human Subjects at (512) 232-2685 or the Office of Research Support at (512) 471-8871.

Thank you for your consideration.
Brian K. Obert
bkobert@austin.utexas.edu
512-573-7376

If interested in participating in focus group interviews, please complete and return the attached focus group scheduling form to Brian Obert at bkobert@austin.utexas.edu.

APPENDIX F: Attachment to Focus Group Participant Recruitment Email

Thank you for your interest in participating in my research project. I would like this to be as convenient as possible for you. In order to schedule the interview that is convenient for all participants I ask that you mark the times that work with your schedule. Please highlight the best options and send this information back to me.

On April 7, 2013	4pm – 6pm	6-pm-8pm	8pm – 10pm
On April 8, 2013	4pm – 6pm	6-pm-8pm	8pm – 10pm
On April 9, 2013	4pm – 6pm	6-pm-8pm	8pm – 10pm
On April 10, 2013	4pm – 6pm	6-pm-8pm	8pm – 10pm
On April 11, 2013	4pm – 6pm	6-pm-8pm	8pm – 10pm

If you have any questions, please feel free to contact me via email at bkobert@austin.utexas.edu or by phone at (512) 573-7376. In addition, if you have any questions about your rights as a research participant, or if you have complaints, concerns, or questions about the research, please contact Jody Jensen, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects at (512) 232-2685 or the Office of Research Support at (512) 471-8871.

Thank you again for your interest. I will respond with the time of your focus group interview session on April 1, 2013.

Brian Obert
Doctoral Candidate
The University of Texas at Austin

APPENDIX G: Focus Group Consent Form

Focus Group Participant Consent Form

You are invited to participate in a research study, entitled "College Student Interest in Second-year Retention Programs: An Examination of Second-year Retention Program Applicant Profiles and Motivations". The study is being conducted by Brian Obert as part of his Doctoral research in the Higher Education Administration Department of The University of Texas at Austin.

Department Mailing Address:
Higher Education Administration Program
Department of Educational Administration
The University of Texas at Austin
1 University Station D5400
Austin, Texas 78712-0374

Investigator Mailing Address:
Brian Obert
805 Kavanagh Dr.
Austin, TX 78748

Department Phone Number:
512-471-7551

Investigator Phone Number:
512-573-7376

Department Email Address:
heap@austin.utexas.edu

Investigator Email Address:
bkobert@austin.utexas.edu

This form provides you with information about the study. The person in charge of this research will also describe this study to you and answer all of your questions. Please read the information below and ask any questions you might have before deciding whether or not to take part. Your participation is entirely voluntary. You can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You can stop your participation at any time and your refusal will not impact current or future relationships with The University of Texas at Austin or Colorado State University. To do so simply tell the researcher you wish to stop participation. The researcher will provide you with a copy of this consent for your records.

This study aims to provide a deeper understanding of second-year student retention factors, needs, and attitudes.

If you agree to be in this study, we will ask you to do the following things:

Participate in one focus group interview, which will be recorded using a digital audio recorder.

Participants might be invited to a follow-up interview by the researcher for clarification or expansion purposes after the interviews or focus group have been conducted.

Total estimated time to participate in study is 120 minutes for the focus group interview and any possible follow-up questions/clarifications.

Risks of being in the study are considered minimal and expected to be no greater than everyday life.

Benefits of being in the study

For Student Participants:
Potential for greater understanding of your college experience.

For higher education and student Affairs practice:
Potential for greater understanding of the attitudes and decision-making process of first-year students choosing whether or not to apply for participation in second-year retention programs.
Potential for understanding persistence issues for student populations composed primarily of first generation and students of color.

Compensation:
Focus group interview participants will receive $25 Visa Gift Cards for their participation in the focus group interview.

Confidentiality and Privacy Protections:
Focus group interviews will be recorded using a digital audio recorder.
All audio files will be coded in a manner that prevents any identifying information to be visible.
Audio files will be stored in a password protected file on the researchers hard drive.
All identifying information will be removed from the transcripts.
The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.
Authorized persons from The University of Texas at Austin and members of the Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law.

APPENDIX H: Focus Group Protocol

Introduction:

Thank you for agreeing to participate in this focus group discussion today. I'm Brian Obert, a doctoral student in the higher education administration program at The University of Texas at Austin. I'll be your moderator for this session.

My goal for this focus group session is to better understand your needs and attitudes toward your second-year of college through your responses and experiences. During this focus group interview. I am interested in learning about your educational experiences while here at Colorado State University, both in and outside of the classroom. I would like for you to share what you are comfortable sharing, the positive and the negative, about your experiences in this focus group.

In a group interview like this it is really important that you express yourself openly. There are no right or wrong answers. I want to know what you think and how you experience topics in each of these questions to follow. I will be recording this focus group in order to ensure accuracy in reporting my research and also capturing your stories in your own words. This recording will be transcribed. In order to promote confidentiality in this research, you will assign yourself an alias. Identifying information will be removed from the transcriptions to ensure your confidentiality.

Because I am taping this interview, I ask that you identify yourself before each response. I may also remind you occasionally to speak up and to talk one at a time so that I can hear you clearly when I review this focus group. I am your guide, but I want the interaction to flow among and between you – let's have lots of discussion.

Each time I ask a question, there is no need for everyone around the table to respond. However, it is important that a wide range of ideas is expressed. If you would like to add an idea or if you have an idea that contrasts with those that have been aired, then that's the time to jump into the conversation. You don't have to go in a circle. There is no such thing as "your turn" – it is ALWAYS your turn.

Remember you're the experts here. During the discussion, I'm not planning on doing much of the talking, but I'll try to keep things moving along. Our time together today should last between 60 and 90 minutes.

Are there any questions?

Let's begin!

QUESTIONS

1. Let's start with a quick introduction. I would like for you to share where you are from, your major, someone you admire and why.
2. In what setting (classroom, home, work, community group, etc.) do you most effectively acquire knowledge?
3. What are your academic weaknesses? Do you have a plan to address them?
4. Tell me about the role racism or other strong forms of bias have played in your college experience.
5. Talk about your short-term and long-term goals. How do they relate to your day to day activities?
6. Do you feel like you have a strong support people you can turn to in a crisis? What about when it isn't a crisis, you just have a question you can't answer?
7. Do you perform service in an organization or community to which you belong? If so, what were they and what was your role?
8. Do you feel that you belong at college? Do you feel that you have the academic ability to graduate from college? Please explain.
9. Do you feel like you are a part of a social circle on campus? Please explain
10. What kind of activities do you participate in while you are at school?
11. Talk about the process you used, or are using, to select your major.
12. Generally speaking, do you feel like you know what your professional direction is? Please explain.
13. Do you have anyone you consider a mentor at the university? Please explain.
14. How have finances affected your ability to stay enrolled at college? Please explain.
15. Are you familiar with the Key Plus Academic Community? Please state whether or not you applied and why or why not?

Thank you so much for your participation in this focus group. I greatly appreciate your time and your willingness to share your experiences with me and the rest of the group. I would like to remind you that it is important to respect each other's confidentiality from this focus group and I hope that you will not share what was discussed in this group with others. Thank you again for your time. As agreed for your participation, please accept this $25 Visa Gift Card. Thank you all very much. Best of luck with the remainder of your semester.

APPENDIX I: CCHE Admission Eligibility Index

CCHE Admission Eligibility Index, Effective Fall 2008

		SAT	400	500	550	610	690	750	800	840	880	930	970	1010	1050	1080	1120	1160	1200	1240	1280	1310	1350	1400	1440	1490	1550	
			490	540	600	680	740	790	850	870	920	960	1000	1040	1070	1110	1150	1190	1230	1270	1300	1340	1360	1430	1480	1540	1590	1600
		ACT	<12	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
% H.S. Rank	H.S. GPA																											
0-1	0-1.3		45	47	49	51	53	55	57	59	61	63	65	68	70	72	74	76	78	80	82	84	86	88	90	93	95	97
2-3	1.4-1.5		49	51	53	55	57	59	61	63	65	67	69	72	74	76	78	80	82	84	86	88	90	92	94	97	99	101
4	1.6		51	53	55	57	59	61	63	65	67	69	71	74	76	78	80	82	84	86	88	90	92	94	96	99	101	103
5-6	1.7		52	54	56	58	60	62	64	66	68	70	72	75	77	79	81	83	85	87	89	91	93	95	97	100	102	104
7-8	1.8		54	56	58	60	62	64	66	68	70	72	74	77	79	81	83	85	87	89	91	93	95	97	99	102	104	106
9-10	1.9		56	58	60	62	64	66	68	70	72	74	76	79	81	83	85	87	89	91	93	95	97	99	101	104	106	108
11-12	2.0		58	60	62	64	66	68	70	72	74	76	78	81	83	85	87	89	91	93	95	97	99	101	103	106	108	110
13-15	2.1		60	62	64	66	68	70	72	74	76	78	80	83	85	87	89	91	93	95	97	99	101	103	105	108	110	112
16-18	2.2		61	63	65	67	69	71	73	75	77	79	81	84	86	88	90	92	94	96	98	100	102	104	106	109	111	113
19-22	2.3		63	65	67	69	71	73	75	77	79	81	83	86	88	90	92	94	96	98	100	102	104	106	108	111	113	115
23-26	2.4		65	67	69	71	73	75	77	79	81	83	85	88	90	92	94	96	98	100	102	104	106	108	110	113	115	117
27-30	2.5		67	69	71	73	75	77	79	81	83	85	87	90	92	94	96	99	100	102	104	106	108	110	112	115	117	119
31-34	2.6		69	71	73	75	77	79	81	83	85	87	89	92	94	96	98	100	102	104	106	108	110	112	114	117	119	121
35-38	2.7		70	72	74	76	78	80	82	84	86	88	90	93	95	97	99	101	103	105	107	109	111	113	115	118	120	122
39-43	2.8		72	74	76	78	80	82	84	86	88	90	92	95	97	99	101	103	105	107	109	111	113	115	117	120	122	124
44-48	2.9		74	76	78	80	82	84	86	88	90	92	94	97	99	101	103	105	107	109	111	113	115	117	119	122	124	126
49-53	3.0		76	78	80	82	84	86	88	90	92	94	96	99	101	103	105	107	109	111	113	115	117	119	121	124	126	128
54-58	3.1		78	80	82	84	86	88	90	92	94	96	98	101	103	105	107	109	111	113	115	117	119	121	123	126	128	130
59-62	3.2		79	81	83	85	87	89	91	93	95	97	99	102	104	106	108	110	112	114	116	118	120	122	124	127	129	131
63-67	3.3		81	83	85	87	89	91	93	95	97	99	101	104	106	108	110	112	114	116	118	120	122	124	126	129	131	133
68-72	3.4		83	85	87	89	91	93	95	97	99	101	103	106	108	110	112	114	116	118	120	122	124	126	128	131	133	135
73-76	3.5		85	87	89	91	93	95	97	99	101	103	105	108	110	112	114	116	118	120	122	124	126	128	130	133	135	137
77-81	3.6		87	89	91	93	95	97	99	101	103	105	107	110	112	114	116	118	120	122	124	126	128	130	132	135	137	139
82-85	3.7		89	90	92	94	96	98	100	102	104	106	108	111	113	115	117	119	121	123	125	127	129	131	133	136	138	140
86-89	3.8		90	92	94	96	98	100	102	104	106	108	110	113	115	117	119	121	123	125	127	129	131	133	135	138	140	142
90-92	3.9		92	94	96	98	100	102	104	106	108	110	112	115	117	119	121	123	125	127	129	131	133	135	137	140	142	144
93-100	4.0		94	96	98	100	102	104	106	108	110	112	114	117	119	121	123	125	127	129	131	133	135	137	139	142	144	146

Revised 9/4/2007

CCHE Admissions Eligibility Index, Effective Fall 2008

APPENDIX J: Fisher's Exact Test Frequency Tables for Data Analysis

Phase I Data Collection

2x2 Frequency Table – Application Status Relationship to Gender

	Male	Female	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

2x6 Frequency Table – Application Status Relationship to Race-Ethnicity

	Asian-American	African-American	Native American/ Hawaiian/ Pacific Islander	Hispanic	Caucasian	Multiple Ethnicities	
Applicant	a	c	e	g	i	k	a+c+e+g+i+k
Nonapplicant	b	d	f	h	j	l	b+d+f+h+j+l
	a+b	c+d	e+f	g+h	i+j	k+l	a+b+c+d+e+f+g+h+i+j+k+l

2x2 Frequency Table – Application Status Relationship to First Generation Status

	First Gen	Nonfirst Gen	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

2x2 Frequency Table – Application Status Relationship to Pell Eligible

	Pell Eligible	Not Pell Eligible	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

2x5 Frequency Table – Application Status Relationship to University Admission Index Score

	Below 95	96-105	106-115	116-125	126 and above	
Applicant	a	c	e	g	i	a+c+e+g+i
Nonapplicant	b	d	f	h	j	b+d+f+h+j
	a+b	c+d	e+f	g+h	i+j	a+b+c+d+e+f+g+h+i+j

2x5 Frequency Table – Application Status Relationship to High School Grade Point Average

	Below 2.0	2.01-2.5	2.51–3.0	3.01 – 3.5	3.51 and above	
Applicant	a	c	e	g	i	a+c+e+g+i
Nonapplicant	b	d	f	h	j	b+d+f+h+j
	a+b	c+d	e+f	g+h	i+j	a+b+c+d+e+f+g+h+i+j

2x4 Frequency Table – Application Status Relationship to High School Class Rank

	Lower 25% of class	25.1% - 50%	50.1% - 75%	75% - Top of class	
Applicant	a	c	e	g	a+c+e+g
Nonapplicant	b	d	f	h	b+d+f+h
	a+b	c+d	e+f	g+h	a+b+c+d+e+f+g+h

2x5 Frequency Table – Application Status Relationship to College Cumulative GPA

	Below 2.0	2.01-2.5	2.51–3.0	3.01 – 3.5	3.51 and above	
Applicant	a	c	e	g	i	a+c+e+g+i
Nonapplicant	b	d	f	h	j	b+d+f+h+j
	a+b	c+d	e+f	g+h	i+j	a+b+c+d+e+f+g+h+i+j

2x5 Frequency Table – Application Status Relationship to Credit Hours Completed Semester 1

	Fewer than 8	9-11	12-14	15-17	18 or more	
Applicant	a	c	e	g	i	a+c+e+g+i
Nonapplicant	b	d	f	h	j	b+d+f+h+j
	a+b	c+d	e+f	g+h	i+j	a+b+c+d+e+f+g+h+i+j

2x5 Frequency Table – Application Status Relationship to Semester 1 Class Withdrawals

	0	1-3	4-6	7-9	10 or more	
Applicant	a	c	e	g	i	a+c+e+g+i
Nonapplicant	b	d	f	h	j	b+d+f+h+j
	a+b	c+d	e+f	g+h	i+j	a+b+c+d+e+f+g+h+i+j

Phase II Data Collection

2x2 Frequency Table – Application Status Relationship to Positive Self-concept or Confidence

	Below Median Score	Above Median Score	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

2x2 Frequency Table – Application Status Relationship to Realistic Self-appraisal

	Below Median Score	Above Median Score	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

2x2 Frequency Table – Application Status Relationship to Understands and Deals with Racism

	Below Median Score	Above Median Score	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

2x2 Frequency Table – Application Status Relationship to Prefers Long-range Goals to Short-term or Immediate Needs

	Below Median Score	Above Median Score	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

2x2 Frequency Table – Application Status Relationship to Availability of Strong Support Person

	Below Median Score	Above Median Score	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

2x2 Frequency Table – Application Status Relationship to Successful Leadership Experience

	Below Median Score	Above Median Score	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

2x2 Frequency Table – Application Status Relationship to Knowledge Acquired in a Field

	Below Median Score	Above Median Score	
Applicant	a	c	a+c
Nonapplicant	b	d	b+d
	a+b	c+d	a+b+c+d

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Vita

Brian Kenneth Obert was born in Kansas in the early 1970's. Upon graduation from Roy J. Wasson High School in Colorado Springs, Colorado, Brian served four years as a propulsion plant engineer in the United States Navy where he was stationed in Yokosuka, Japan on board the U.S.S. McClusky (FFG-41) and visited ports throughout Southeast Asia and the Persian Gulf with some colorful shipmates. Upon his honorable discharge, he enrolled at Colorado State University and earned a Bachelor of Arts degree in History. While an undergraduate student, he discovered a passion for leadership and diversity education and supporting the retention of college students, who reminded him of those colorful shipmates, and chose to complete a Master of Science degree in Student Affairs in Higher Education at Colorado State University.

He then spent the next eight years working at St. Edward's University in Austin, Texas, working in student organizations as program director and residence life as associate director for housing facilities and operations. Brian was accepted to the University of Texas at Austin's Higher Education Administration doctoral program and spent the next 6 years working at St. Edward's University and pursuing a doctorate part time. Eventually, Brian left St. Edward's to complete graduate studies as a full-time student and furthered his professional experience by working as a graduate student with the University of Texas at Austin's International Office, First-Year Experience Office, and Student Veteran Services.

Permanent Email Address: doc.obert@gmail.com

This manuscript was typed by the author.